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SOMERSET COUNTY COUNCIL

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**Somerset County Council.**

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# **REPORT**

OF THE

**MEDICAL OFFICER OF HEALTH**

FOR THE YEAR

**1931.**

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**WILLIAM G. SAVAGE,**


B.Sc., M.D. (Lond.), D.P.H.,

County Medical Officer of Health.



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**To the Chairman and Members of the Public Health and Housing Committee,  
Somerset County Council.**

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GENTLEMEN,

I beg to submit my twenty-third Annual Report upon the Health and Sanitary Administration of the County. The Ministry of Health has arranged to supply the mortality statistics to each Medical Officer to save separate compilation, and these figures have been adopted in the Tables.

Although the vital statistics for the year are satisfactory they are not quite so good as for the previous year, all the rates being a little higher.

While no extensive expansion of work is possible or desirable under present conditions, small improvements and advances are constantly being made but these are severely limited by shortage of staff. The Isolation Hospital scheme made considerable progress but the new Hospital Orders are only being made in 1932.

The Report has been kept down to as small dimensions as possible and repetition avoided.

A large part of my Report is now taken up with details of the Health work undertaken by the County Health Department, but a brief survey is also given of the general sanitary conditions in the County.

Your obedient servant,

Weston-super-Mare,  
*July, 1932.*

W. G. SAVAGE.



## STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres) :—1,031,666.

Population (1931) :—403,850.

Births :—Total 5,702 ; Legitimate, 5,472 ; Illegitimate, 230. Stillbirths, 232.

Deaths :—Total, 5,269 ; Urban, 2,193 ; Rural, 3,076.

Deaths of children under 1 year of age :—295.

Rateable Value :—£2,205,636 (1931).

Sum represented by a penny rate :—£8,627 13s. 5d. (1930-31) ; £8,648 11s. 5d. (1931-32) ;  
£8,759 4s. 11d. (1932-33).

Birth rate :—14.11.

Death rate :—13.06.

Rate of infantile mortality :—51.74.

Percentage of births which were illegitimate :—4.03.

The birth rate is again very low.

The death returns are corrected as regards the distribution of deaths to the districts to which they properly belong. To correct for differences of age and sex distribution a standardizing factor has to be used. Factors have been obtained, based upon the last available census figures. So corrected the following figures are obtained :—

	<i>Net Death-rate.</i>	<i>Standardizing Factor.</i>	<i>Standardized Death-rate.</i>
Rural Districts ... ..	13.37	0.772	10.31
Urban Districts ... ..	12.64	0.827	10.45
Administrative County ... ..	13.06	0.795	10.38
England and Wales ... ..	12.3	—	12.3

Somerset now contains a high proportion of old people and this is reflected in the difference between the net and standardized death rates. Compared with a population of standard age and sex distribution, which is what the standardized rate permits, it shows a rate of 10.38 which is very low but well above the lowest on record for the County *i.e.*, 9.21.

The causes of death are set out in Tables A. and B. at the end of the Report. Table B. shows that heart diseases are responsible for the largest number of deaths from one single group of causes (1077 deaths), cancer and other forms of malignant disease the next largest (715 deaths), bronchitis and pneumonia caused 457 deaths, while tuberculosis caused 268 deaths.

As pointed out in previous years, we cannot hope to lower the death rate further to any great extent but must aim at a postponement of the period of death. Table I shows that this is taking place.

TABLE I.

**Proportion of the deaths in each year divided amongst the different age groups.**

	Under 1 year.	1—45.	45—65.	65 and over.
1911	12.9	21.0	20.8	45.3
1912	10.6	21.0	23.0	45.4
1913	10.8	23.3	21.0	44.9
1914	9.2	22.0	22.3	46.5
1920	9.7	19.1	22.3	48.9
1921	9.3	18.0	23.1	49.6
1922	6.6	17.3	22.2	53.9
1923	7.0	18.7	23.1	51.2
1924	7.1	17.5	21.8	53.6
1925	6.5	17.0	22.2	54.3
1926	6.9	16.0	22.3	54.8
1927	5.3	15.3	23.5	55.9
1928	5.6	16.6	23.2	54.6
1929	5.2	14.8	22.3	57.7
1930	5.6	15.5	23.4	55.5
1931	5.6	15.1	22.7	56.6

TABLE II.  
Rural Districts.

YEAR.	Population estimated to middle of each Year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.	
		Number.	Rate.	Number.	Rate per 1,000 Births registered.	Number	Rate.
1921	225,074	4,451	19.78	252	56.62	2,594	11.53
1922	225,651	4,198	18.60	197	46.93	3,008	13.33
1923	227,600	4,170	18.32	195	46.76	2,602	11.43
1924	231,200	3,907	16.89	201	51.45	2,820	12.20
1925	231,100	3,735	16.16	183	49.0	2,802	12.12
1926	231,700	3,654	15.77	180	49.26	2,728	11.77
1927	233,000	3,507	15.05	165	47.04	2,891	12.41
1928	235,440	3,615	15.35	155	42.88	2,754	11.70
1929	235,500	3,459	14.69	166	47.99	3,012	12.37
1930	232,040	3,465	14.93	162	46.76	2,747	11.84
Averages for years 1921—1930	230,831	3,816	16.5	186	48.7	2,796	12.1
1931	230,100	3,442	14.96	181	52.59	3,076	13.37

Urban Districts.

1921	162,025	3,055	18.86	168	54.99	1,906	11.76
1922	163,495	2,740	16.76	137	50.00	2,078	12.71
1923	164,700	2,651	16.10	118	44.51	1,852	11.24
1924	167,100	2,597	15.54	149	57.37	2,066	12.32
1925	166,900	2,436	14.60	133	54.60	2,045	12.25
1926	167,800	2,423	14.44	137	56.54	1,902	11.33
1927	168,500	2,262	13.42	100	44.21	2,110	12.52
1928	169,810	2,336	13.76	114	48.80	2,058	12.12
1929	171,060	2,233	13.05	108	48.37	2,240	13.11
1930	172,830	2,340	13.54	104	44.44	1,986	11.50
Averages for years 1921—1930	167,422	2,507	15.0	127	50.7	2,024	12.1
1931	173,750	2,260	13.01	114	50.44	2,193	12.64



## GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

This was set out in detail in my Annual Report for the previous year and remains practically unaltered.

### PREVALENCE AND CONTROL OVER INFECTIOUS AND OTHER DISEASES.

#### Acute Infectious Diseases.

As set out in my Report for last year, nine hospital areas are included in the scheme made under Sec. 63 of the Local Government Act 1929. During the year considerable progress was made in bringing the scheme into operation, but no fresh Hospital areas were actually constituted during the year.

The notifications are shown in Table III. As County Medical Officer, I know very little about their incidence. The notifications are made to the District Medical Officers of Health who are responsible for all steps to prevent their spread. All the County M.O.H. knows is the number of notifications each week—not even the names or addresses. I have never regarded existing arrangements as the best possible. Infectious diseases are best controlled over a wide area and it would be much more satisfactory if this was a function of the County Council in all the rural and quite small urban areas. The County Council is now a partner to a considerable extent in isolation hospital provision and provides laboratory facilities for diagnosis. As the Maternity and Child Welfare authority over most of the County it is concerned with the prevention and reduction of deaths and damage to health from measles and whooping cough and its Health Visitors spend much time on this work. Especially as Education Authority is the County Council concerned with infectious disease amongst school children. This dual control is unsatisfactory in actual working, and, in my opinion, it would have been more economical and satisfactory if the control over infectious disease had been transferred to the County Council.

**Small Pox.** I am glad to be able to report that there were no cases of small-pox during the year in the County.

The 1931 vaccination figures are not yet available, but early in 1932 those for 1930 were reported. Of 5,684 births only 1,634 were returned as successfully vaccinated. This gives only 29 per cent. vaccinated, the percentage varying from six in Harptree to sixty-three in the Langport registration sub-district.

With so much unvaccinated material, Somerset has been very fortunate in having so few importations of small-pox, while we have been highly successful in limiting any spread.

**Diphtheria.** 279 cases were notified with 14 deaths, a case mortality of 5 per cent. The distribution of the cases is shown in Table III. The number of cases was exceptionally low.

**Scarlet Fever.** The prevalence of this disease was also low, only 449 cases were notified. There were 4 deaths, giving a case mortality of 0.9 per cent.

**Enteric and Paratyphoid Fevers.** Only 13 cases were notified, with no deaths.

**Encephalitis Lethargica.** Table III. shows that 13 cases were notified, and that these were distributed through the County and with no epidemic. There were, however, 11 deaths, a case mortality of 84.6 per cent.

Only 4 cases of Cerebro-spinal Meningitis and 4 cases of acute Poliomyelitis were notified.

## INFECTIOUS DISEASES.

TABLE III.

	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric and Paratyphoid Fevers.	Puerperal Fever.	Ophthalmia Neonatorum.	Cerebro-spinal Meningitis.	Dysentery.	Malaria.	Pneumonia.	Acute Poliomyelitis.	Encephalitis Lethargica.
<b>URBAN</b>												
Bridgwater	0	25	1	0	0	2	0	0	0	29	1	0
Burnham	0	3	1	1	0	0	0	0	0	4	0	0
Chard	0	0	0	0	0	0	0	0	0	5	0	0
Clevedon	0	0	2	0	0	0	0	0	0	8	0	0
Crewkerne	0	0	1	0	0	0	0	0	0	6	0	0
Frome	0	24	32	1	1	0	1	0	0	1	0	1
Glastonbury	0	5	0	0	0	0	0	0	0	7	1	0
Highbridge	0	2	6	0	0	0	0	0	0	1	0	0
Ilminster	0	9	1	0	0	0	0	0	0	4	0	1
Midsomer Norton	0	11	8	0	0	0	0	0	0	19	0	0
Minehead	0	6	0	0	1	0	0	0	0	0	0	0
Portishead	0	1	0	0	0	0	0	0	0	5	0	0
Radstock	0	7	3	0	0	0	0	0	0	2	0	0
Shepton Mallet	0	3	3	1	0	0	0	0	0	12	0	1
Street	0	2	5	0	1	0	0	0	0	7	0	0
Taunton	0	34	15	0	0	7	0	0	0	9	0	2
Watchet	0	0	0	0	0	0	0	0	0	0	0	0
Wellington	0	50	1	0	0	0	0	0	0	6	0	0
Wells	0	1	0	0	0	0	0	0	0	5	0	0
Weston-super-Mare	0	25	63	0	2	2	1	0	0	22	0	0
Wiveliscombe	0	1	1	0	0	0	0	0	0	0	0	0
Yeovil	0	0	15	2	0	2	0	0	0	40	0	0
<b>RURAL</b>												
Axbridge	0	43	26	3	2	3	0	0	0	37	0	1
Bath	0	18	12	0	1	0	0	0	0	1	0	3
Bridgwater	0	12	1	0	0	0	0	0	1	14	0	0
Chard	0	4	3	0	0	0	0	0	0	18	0	0
Clutton	0	19	4	0	1	0	0	0	0	28	0	0
Dulverton	0	2	0	0	0	1	0	0	0	13	0	0
Frome	0	10	4	0	0	1	0	0	8	0	1	0
Keynsham	0	12	10	1	0	0	0	0	0	25	0	1
Langport	0	2	6	1	0	0	0	0	0	8	0	2
Long Ashton	0	15	9	0	0	0	0	0	0	10	0	0
Shepton Mallet	0	21	1	1	1	0	0	0	0	10	0	0
Taunton	0	14	3	2	0	1	0	0	0	20	0	1
Wellington	0	8	5	0	0	0	1	0	0	1	0	0
Wells	0	4	11	0	1	0	0	0	0	26	0	0
Williton	0	3	2	0	2	0	0	0	0	0	0	0
Wincanton	0	47	7	0	0	2	0	22	0	27	0	0
Yeovil	0	6	17	0	0	1	1	0	0	16	1	0
Urban Districts	0	209	158	5	5	13	2	0	0	192	2	5
Rural Districts	0	240	121	8	8	9	2	22	9	254	2	8
Administrative County	0	449	279	13	13	22	4	22	9	446	4	13



**Measles and Whooping Cough.** Measles and Whooping Cough are not notifiable diseases so the number of cases is not known. The number of deaths is however available. During 1931 there were 27 deaths from measles and 23 deaths from whooping cough, considerably higher figures than last year. The following table shows the deaths in five year periods since 1902.

Period	Deaths from Measles : average per year for the period.	Deaths from Whooping Cough : average per year for the period.
1902-06	60.2	57.0
1907-11	28.0	48.0
1912-16	42.8	40.4
1917-21	10.6	32.0
1922-26	12.4	25.6
1927-31	14.8	20.4

This table shows a marked decline in the average number of deaths each year from these diseases. There is no evidence of a diminishing virulence that I am aware of, and the decline must be ascribed in large measure to the increased care now being given by parents to the nursing and looking after of children suffering from these diseases. Since 1917 the County Council has been active in this matter. Cases are not notifiable by doctors, but school teachers are instructed to report all cases or suspected cases of these diseases to the County Health Department. The Health Visitors visit the homes of every known and ascertainable case with the object not of preventing the spread of infection, but to see every case is properly looked after, that a doctor is called in if necessary, and with the general aim of preventing complications and reducing mortality. The work takes up a good deal of time but is thoroughly worth while and I believe has helped materially towards the reduction of the mortality. The Health Visitors' reports all show the much greater care now given to these two diseases.

Measles cases die from pneumonia and other complications and it is important to have hospital accommodation for these cases. Scarlet Fever is at present an extremely mild disease, and many cases should be nursed at home and more accommodation be made available for measles cases. A good many lives would be saved in this way. Under the new County Isolation Hospital scheme it is proposed to utilise beds for the treatment of cases of measles.

The injection of serum from a convalescent case of measles gives immunity for several weeks and can be used to give temporary protection, but it is difficult and expensive to obtain and very little use of it is made in the county.

For Measles, our figures show that 13 to 18 per cent. of the deaths are under one year ; 60 to 70 per cent. are one to five ; and under 20 per cent. are over five years. It is of great advantage to postpone an attack to as late in childhood as possible. For Whooping Cough about 50 per cent. of the deaths in the county are under one year, about 44 per cent. one to five years and only about 6 per cent. over five years. There is little or no alteration in these proportions and the decline shown has not been in one group more than another. Death is usually from respiratory complications. Owing to the very high infectivity and the fact that the worst cases are usually babies under one year, hospital treatment has not been much used for this disease.

### VENEREAL DISEASES.

The attendances of Somerset cases at the different clinics for the year 1931 were as follows :—

Clinic.	New cases 1931	Attendances 1931	NEW CASES.				ATTENDANCES.		
			1928.	1929.	1930.	Increase or decrease during 1931.	1929.	1930.	Increase or decrease during 1931.
Bath .....	15	467	14	14	19	— 4	565	495	— 28
Bristol .....	62	820	63	71	59	+ 3	569	520	+ 300
Taunton .....	58	1,015	80	77	86	— 28	1,381	1,476	— 461
Yeovil .....	59	1,022	69	77	52	+ 7	856	1,028	— 6
Bridgwater .....	15	231	36	34	25	— 10	514	328	— 97
Frome .....	6	179	12	8	21	— 15	195	341	— 162
Glastonbury .....	5	56	9	18	3	+ 2	175	138	— 82
Minehead .....	8	76	14	22	14	— 6	169	234	— 158
Radstock* .....	—	—	10	3	7	— 7	50	10	— 10
Weston-super-Mare .....	43	980	68	65	52	— 9	1,271	623	+ 357
All Clinics .....	271	4,846	375	389	338	— 67	5,745	5,193	— 347

\*Closed from April, 1931.

The figures show a decrease from the previous year. 72 per cent. of the new cases and 73 per cent. of the total attendances were at County Council clinics.

Medical Practitioners in the County qualified to receive supplies of arsenobenzol compounds can obtain them free of charge on request to the County Medical Officer. Only 21 Medical Practitioners are on this free list.

Bacteriological work in connection with venereal diseases is arranged for either in connection with Bristol University Laboratory or at the County Health Laboratory.

During the year the following samples were examined :—

Samples.	For Medical Officers of Clinics	For Medical Practitioners.	Total.
Wasserman	248	124	372
Gonococcus	526	62	588
Spirochetes	3	1	4
Fixation Tests	5	0	5
	782	187	969

### TUBERCULOSIS.

No developments of any importance took place during the year, and the question of the provision of additional accommodation for non-pulmonary and advanced pulmonary tuberculosis cases was further deferred.

TABLE IV.

Year.	Phthisis Death rates.			Other Tuberculous Diseases			Tuberculosis Death-rate.	Deaths in a population of 406,000.	
	Rural.	Urban.	County.	Rural.	Urban.	County.	County.	Phthisis.	All Tuberculosis
1901	0.88	0.84	0.871	0.18	0.23	0.202	1.073	354	435
1902	0.86	0.89	0.877	0.20	0.19	0.201	1.078	356	437
1903	0.94	0.76	0.879	0.19	0.34	0.251	1.130	357	459
1904	0.99	0.97	0.989	0.20	0.34	0.255	1.244	402	505
1905	0.90	0.91	0.905	0.14	0.18	0.162	1.067	367	433
1906	0.90	0.86	0.890	0.13	0.37	0.221	1.111	361	451
1907	0.83	0.85	0.842	0.24	0.26	0.253	1.095	341	445
1908	0.91	0.93	0.922	0.24	0.31	0.274	1.196	375	485
1909	0.82	0.85	0.833	0.24	0.27	0.255	1.088	338	441
1910	0.98	0.78	0.912	0.16	0.24	0.197	1.109	371	451
1911	0.83	0.76	0.804	0.15	0.39	0.240	1.044	327	424
1912	0.69	0.90	0.778	0.17	0.20	0.191	0.970	315	394
1913	0.74	0.67	0.721	0.15	0.30	0.239	0.960	293	389
1914	0.86	0.79	0.833	0.21	0.26	0.232	1.065	338	432
1915	0.84	1.13	0.960	0.18	0.23	0.201	1.160	389	471
1916	0.75	0.97	0.838	0.16	0.25	0.194	1.032	340	418
1917	0.90	1.05	0.962	0.18	0.21	0.191	1.153	390	468
1918	1.09	1.30	1.180	0.21	0.24	0.225	1.403	479	569
1919	0.85	0.90	0.871	0.21	0.22	0.212	1.083	355	439
1920	0.65	0.93	0.765	0.14	0.27	0.196	0.961	310	390
1921	0.63	0.76	0.685	0.16	0.30	0.220	0.904	278	367
1922	0.75	0.78	0.761	0.18	0.18	0.180	0.941	309	382
1923	0.65	0.76	0.696	0.19	0.22	0.206	0.902	282	366
1924	0.60	0.74	0.656	0.15	0.13	0.140	0.797	267	324
1925	0.61	0.73	0.659	0.12	0.14	0.126	0.784	268	319
1926	0.53	0.54	0.533	0.13	0.14	0.138	0.671	217	273
1927	0.55	0.64	0.586	0.13	0.13	0.130	0.716	237	290
1928	0.59	0.71	0.639	0.08	0.16	0.113	0.753	259	306
1929	0.55	0.65	0.593	0.11	0.14	0.121	0.714	240	289
1930	0.54	0.52	0.532	0.09	0.09	0.091	0.623	216	253
1931	0.45	0.65	0.533	0.14	0.12	0.131	0.664	216	270

The pulmonary tuberculosis death rate is the same as last year, but that for other tuberculous diseases shows a slight increase.

Compared with twenty-five years ago, the decline has been 40 per cent. for all tuberculosis, the reduction being 40.1 per cent. for pulmonary and 40.7 per cent. for non-pulmonary tuberculosis.



The following figures show the deaths and notifications since 1913 :—

**TABLE V.**

Year.	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Deaths.	377	422	428	467	393	480	388	358	350	366	354	317	312	268	287	305	290	253	268
*Notifi- cations.	958	984	933	872	1036	949	922	860	882	732	707	701	769	729	703	713	605	640	585

\*These are primary cases only and do not include institutional cases.  
Of the 268 deaths from tuberculosis, 42 were not notified.

**TABLE VI.**

**New cases of tuberculosis and deaths from the disease in the County during 1931.**

Age Periods.	New cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M	F.	M.	F.	M.	F.	M.	F.
0—1	0	0	2	0	0	0	1	1
1—5	1	1	15	13	0	2	3	4
5—10	14	10	29	16	2	1	6	4
10—15	11	10	16	13	15	33	1	4
15—20	14	30	6	7	40	60	7	11
20—25	27	40	6	8	35	15	6	4
25—35	39	67	7	10	7	5	0	1
35—45	47	39	2	2				
45—55	28	17	1	4				
55—65	18	9	0	1				
65 and upwards	3	1	0	1				
Totals	202	224	84	75	99	116	24	29

**TABLE VII.**  
**Tuberculosis Notifications and Deaths.**

URBAN DISTRICTS.	Number of primary cases notified.		Number of Deaths during the year from Pulmonary Tuberculosis.	Number of Deaths during the year from other varieties of Tuberculosis.	RURAL DISTRICTS.	Number of primary cases notified.		Number of Deaths during the year from Pulmonary Tuberculosis.	Number of Deaths during the year from other varieties of Tuberculosis.
	Pulm.	Non-Pulm.				Pulm.	Non-Pulm.		
Bridgwater .....	26	12	10	3	Axbridge .....	19	9	11	6
Burnham .....	19	0	3	0	Bath .....	13	5	11	0
Chard .....	9	2	4	1	Bridgwater .....	12	3	7	4
Clevedon .....	4	0	2	0	Chard .....	7	3	5	1
Crewkerne .....	5	2	3	0	Clutton .....	10	11	5	2
Frome .....	12	2	9	1	Dulverton .....	5	0	0	2
Glastonbury .....	4	2	5	1	Frome .....	8	2	2	2
Highbridge .....	6	0	3	0	Keynsham .....	11	7	4	3
Ilminster .....	1	2	0	0	Langport .....	7	2	4	0
Midsomer Norton .....	7	2	5	1	Long Ashton .....	20	6	14	3
Minhead .....	11	2	3	0	Shepton Mallet .....	7	1	2	0
Portishead .....	2	2	3	0	Taunton .....	22	15	11	4
Radstock .....	2	4	1	1	Wellington .....	5	1	4	1
Shepton Mallet .....	2	4	2	1	Wells .....	9	4	3	1
Street .....	8	3	5	1	Williton .....	18	2	6	2
Taunton .....	33	10	18	4	Wincanton .....	16	12	9	1
Watchet .....	3	3	2	0	Yeovil .....	19	7	5	1
Wellington .....	9	1	4	1					
Wells .....	5	1	2	0					
Weston-s-Mare .....	30	5	14	2					
Wiveliscombe .....	3	0	1	0					
Yeovil .....	17	10	13	3					
Totals .....	218	69	112	20	Totals .....	208	90	103	33

**Summary of Treatment given during 1931.**

Sanatorium	...	...	...	...	174
Sanatorium with Dispensary	...	...	...	...	41
„ Domiciliary (without shelter)	...	...	...	...	4
„ „ (with shelter)	...	...	...	...	6
„ Dispensary and Domiciliary	...	...	...	...	1
Dispensary and Domiciliary and shelter	...	...	...	...	1
Dispensary (4 with shelter)	...	...	...	...	80
Shelter provided at home	...	...	...	...	16

In addition, milk, for a period of six or eight weeks, was provided for 90 cases ; Dental treatment for 5 cases ; X-ray examinations for 26 cases, (52 examinations).

Unused buildings at Quantock Sanatorium were again utilized during 1931 as a Summer Camp. Children were selected who were predisposed to tuberculosis on account of general debility or undernourishment, with special attention to those from homes in which there was an active case of tuberculosis. Of such children, 40 girls and 40 boys each for four weeks were given treatment under open-air conditions and on the lines of a holiday camp. The increase in weight and marked improvement in general health which resulted was again satisfactory. This work must be regarded as an important piece of tuberculosis preventive work. The Staff utilised was almost entirely voluntary.

Dr. Short, County Tuberculosis Officer, has drawn up the following remarks dealing with the treatment given under the County Council scheme and the results obtained.

### Tuberculosis Officer's Clinical Report for 1931.

The year 1931 was not a very good one from the point of view of the tuberculosis patient and there was a slight increase in the number of deaths. This increase was all on the "non-Pulmonary" side, the deaths from Pulmonary Tuberculosis being the same as last year, which was the lowest number ever recorded in Somerset.

As regards the cases which were notified for the first time, there was a considerable increase in those found to be suffering from bone and joint lesions and from abdominal tuberculosis, but there was a still greater decrease in the pulmonary cases, which is encouraging from the point of view of the risk of infection to others.

The age period "20 to 25" was again the "danger period" as regards discovery of the disease. For some years past the average age has been rising slowly, and a new problem is developing as persons in this new "danger period" are more difficult to keep under supervision than they were in earlier years.

The number of cases found suitable for treatment by Artificial Pneumothorax has increased, and while this treatment is tedious and takes up a considerable amount of time, it is certainly proving valuable, especially in cases whose outlook with any other treatment would be bad.

The primary induction is usually performed by Dr. Martyn at Quantock Sanatorium, but the "refills" are being carried out at the Tuberculosis Dispensaries. It is necessary to have X-ray control of the patient's chest throughout the long course of the treatment and this is a somewhat serious difficulty in Somerset.

The County Tuberculosis Staff have been able to co-operate with the medical practitioners of the County very effectively, and this has been to the increasing benefit of the patients themselves as well as the Tuberculosis Scheme. The Tuberculosis Officers are being used as consultants more freely every year, in doubtful and difficult cases.

The County Sanatoria continued their invaluable work, both for early and advanced cases, and the voluntary Care Committees have again given generously of their time and money to enable patients to take advantage of treatment offered them.

The new cases seen numbered 1,435, and they were classified as follows:—

PULMONARY TUBERCULOSIS.		T.B. Negative	...	...	207	
		T.B. Positive Stage 1	...	...	6	
		T.B. Positive Stage 2	...	...	102	
		T.B. Positive Stage 3	...	...	35	
						350
NON-PULMONARY TUBERCULOSIS.		Bones and Joints	...	...	30	
		Abdominal	...	...	13	
		Other Organs	...	...	6	
		Peripheral Glands	...	...	44	
						93
Not Tuberculous		...	...	...	...	981
Diagnosis not completed on 31st December, 1931		...	...	...	...	11
						1,435

L. J. SHORT.



TABLE VIII.

Condition of all cases discharged from Quantock Sanatorium, from the opening until 31st December, 1931.

	<i>Cases.</i>	<i>Percentage.</i>
Cured .....	24	2.87
Arrested and Working .....	242	28.98
Arrested but <i>not</i> Working .....	15	1.80
Not Arrested but Working .....	220	26.35
Not Arrested and <i>not</i> Working .....	97	11.62
Lost sight of .....	106	12.69
Dead .....	131	15.69
	<hr/> 835 <hr/>	

*Note.* Some of the cases are not admitted as curative cases but as advanced cases sent in to prevent home infection. This accounts for almost all the "dead" group.

The expression "arrested" has a technical meaning, and is only applied to cases free from any symptoms for at least two years. Many in the "non-arrested" group are apparently quite well, but the two years' period has not elapsed.

TABLE IX.

**All cases under treatment. Complete results as regards working capacity.**

All years, (1912-1931)		Cured.	Working.	Not Working.	Dead.	Lost sight of or Removed.	Total cases.
Men	Cases	846	446	278	1,244	528	3,342
	Percentage	25	14	8	37	16	
Women	Cases	824	638	297	1,100	562	3,421
	Percentage	24	19	.9	32	16	
Children	Cases	1,429	581	160	165	380	2,715
	Percentage	53	21	6	6	14	
Un- Classified	Cases	0	0	0	124	229	353
	Percentage	0	0	0	35	65	
Total	Cases	3,099	1,665	735	2,633	1,699	9,831
	Percentage	32	17	7	27	17	

TABLE X.  
Admissions to Sanatorium during 1931.

Sanatorium.	Men.	Women.	Children.	Total.
Quantock .....	55	73	—	128
Taunton .....	15	15	2	32
Wincanton .....	18	14	—	32
Compton Bishop .....	—	—	40	40
Alton Hospital .....	—	—	9	9
Bath Ortho. Hospital .....	—	—	6	6
	88	102	57	247

TABLE XI.  
Cases treated through the County Dispensaries.

Dispensary.	Persons treated at Dispensaries during 1931.		Under treatment at Dispensaries Dec. 31st, 1931.		Total Dispensary Attendances 1931.	Total Persons examined 1931.
	Insured.	Uninsured.	Insured.	Uninsured.		
Bath (City) .....	—	140	—	38	1,630	590
Bath (County) .....	—	23	—	8	326	108
Bridgwater .....	42	176	11	68	886	398
Bristol .....	5	69	1	49	455	208
Chard .....	23	62	1	7	204	87
Clevedon .....	6	31	2	21	282	101
Frome .....	8	33	4	17	255	100
Glastonbury .....	7	38	2	12	265	121
Langport .....	9	35	3	11	204	89
Minehead .....	13	130	11	126	712	286
Radstock .....	3	43	2	39	294	121
Shepton Mallet .....	1	22	—	12	174	89
Taunton .....	8	150	4	71	1,016	377
Wellington .....	12	37	3	19	324	104
Weston-super-Mare .....	13	73	6	47	613	300
Wincanton .....	3	31	—	16	213	99
Yeovil .....	41	55	17	22	619	255
	194	1,148	67	583	8,472	3,433
	1,342		650			



TABLE XII.

**Table showing the work of the Dispensaries during the Year 1931.**

DIAGNOSIS.	PULMONARY.		NON-PULMONARY		TOTAL.		GRAND  TOTAL.						
	Adults.	Children.	Adults.	Children.	Adults.	Children.							
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.							
A.—NEW CASES examined during the year (excluding contacts)—													
(a) Definitely tuberculous .. ..	124	158	20	11	14	16	34	20	138	174	54	31	397
(b) Diagnosis not completed .. ..	—	—	—	—	—	—	—	—	3	1	1	5	10
(c) Non-tuberculous .. ..	—	—	—	—	—	—	—	—	130	174	176	129	609
B.—CONTACTS examined during the year—													
(a) Definitely tuberculous .. ..	1	5	6	4	—	1	4	1	1	6	10	5	22
(b) Diagnosis not completed .. ..	—	—	—	—	—	—	—	—	—	—	1	—	1
(c) Non-tuberculous .. ..	—	—	—	—	—	—	—	—	25	90	135	122	372
C.—CASES written off the Dispensary Register as—													
(a) Recovered .. ..	54	78	37	34	5	7	22	19	59	85	59	53	256
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) .. ..	—	—	—	—	—	—	—	—	163	265	317	259	1,004
D.—NUMBER OF CASES on Dispensary Register on December 31st—													
(a) Definitely tuberculous .. ..	673	855	240	222	51	80	152	127	724	935	392	349	2,400
(b) Diagnosis not completed .. ..	—	—	—	—	—	—	—	—	3	1	2	5	11
1. Number of cases on Dispensary Register on January 1st ..	2,507		2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years .. ..						24				
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ..	90		4. Cases written off during the year as Dead (all causes) .. ..						181				
5. Number of attendances at the Dispensary (including Contacts) ..	6,842		6. Number of Insured Persons under Domiciliary Treatment on the 31st December .. ..						119				
7. Number of consultations with medical practitioners— (a) Personal .. .. (b) Other .. ..	509 1,863		8. Number of visits by Tuberculosis Officers to homes (including personal consultations) .. ..						629				
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes .. ..	14,573		10. Number of— (a) Specimens of sputum, etc., examined .. .. (b) X-ray examinations made .. in connexion with Dispensary work						578 53				
11. Number of "Recovered" cases restored to Dispensary Register, and included in A(a) and A(b) above .. ..	3		12. Number of "T.B. plus" cases on Dispensary Register on December 31st .. ..						494				

during the year from Institutions approved for the treatment of Tuberculosis.

[illegible]

**Compton Bishop Children's Home.** This very valuable institution was opened in October, 1917 for 19 beds and enlarged in 1919 for 29 beds and in 1928 to take 33 children. It has always been run very economically and the results of treatment have been most satisfactory. The average duration of stay is about 11 months.

Every case sent is a definitely notified case, except a few doubtful cases sent to be cleared up, so this prolonged stay is not excessive. The condition of all cases discharged up to the end of 1931, excluding 12 cases found non-tuberculous and 20 which stayed less than a month, is as follows :—

	No.	Percentage.
Cured .. .. .	204	48.0
Arrested (working or at school) .. .. .	127	29.9
Not Arrested—working .. .. .	45	10.6
Not Arrested—Not working .. .. .	15	3.5
Lost sight of .. .. .	16	3.8
Dead—of tuberculosis .. .. .	13	4.2
of other conditions .. .. .	2	
Not ascertained .. .. .	3	
	<hr/> 425 <hr/>	

Excluding the few lost sight of cases, over 80 per cent. are perfectly well ; 14 per cent. are in the group " Not arrested " but many of these are well and will be cured ; only 13 subsequently died of tuberculosis.

**Non-pulmonary tuberculosis Hospital treatment.** It is of value to tabulate the extent to which cases sent to the Bath Orthopaedic Hospital and to Alton Hospital have benefited by treatment. The following gives the condition of all those cases paid for by the County Council and discharged from hospital since 1925 (7 years). The results may be considered as satisfactory.

	No.	Percentage.
Cured .. .. .	24	31.6
Arrested and Working .. .. .	20	26.3
Arrested but not working .. .. .	3	4.0
Not arrested but working .. .. .	9	11.8
Not arrested and not working .. .. .	14	18.4
Lost sight of .. .. .	2	2.6
Dead .. .. .	4	5.3
	<hr/> 76 <hr/>	

**Quantock Sanatorium.** The Medical Superintendent, Dr. V. C. Martyn, has furnished the following Report :—

The Sanatorium has been open for the reception of 68 cases, 33 males and 35 females, throughout the year 1931. During this time 128 cases have been admitted, of whom 55 were males and 73 females. 133 patients were discharged, *i.e.*, 59 males and 74 females. There was one death during the year. The average stay for female patients was 186 days, and for male patients 214 days. This is an average stay of about 28 weeks for each patient. No patient left the Sanatorium before the completion of the required treatment, with the exception of two who were dismissed for refusing treatment.

Treatment was carried out in the same way as in previous years, *i.e.*, by rest, graduated exercise and work with good plain food under open-air conditions.



For those patients who are suitable and willing to undergo the treatment, Artificial Pneumothorax is induced. On discharge from Sanatorium the refills are done either by the Tuberculosis Officer or the patient attends here as an out patient. I believe that most of the patients who have had this treatment are doing well.

X-ray work continues to increase and comprised 320 screen and 30 film exposures.

Amusements both in and outdoor are furnished for the patients—during the Winter months Concerts, Whist Drives, Billiard Matches, etc., help to keep the patients cheerful. There is a good library which has been largely increased recently by gifts from the Bristol Red Cross Society. I hope in the near future to obtain a small Cinema apparatus which would be a great help in providing entertainment for the patients and staff.

I should like again to thank the Matron and nursing staff, the engineering staff and gardeners for their loyal co-operation and devoted work for the patients.

#### WEIGHTS.

##### Increase in weights in Kilos.

	1—6	6—12	12 and over.	Total.
Males ... ..	30	16	0	46
Females ... ..	34	27	5	66
The average gain in weight of all patients (127) weighed on discharge				= 4.90 kilos
„ „ of 56 male patients				= 3.76 „
„ „ of 71 female patients				= 5.80 „
The average loss in weight of 15 patients weighed on discharge				= 1.73 „

Six patients were not weighed on discharge, 4 being on absolute rest ; 1 patient died following A.P., and the other was found “not T.B.” The average gain in weight of 116 patients weighed on discharge during 1930 was 5.28 kilos. In 1931 the average gain in weight of 127 patients was 4.90 kilos, showing a decrease of 0.38 kilos.

##### Working capacity of patients on admission and discharge.

	<i>Full Working Capacity.</i>		<i>Fit for light work.</i>		<i>Unfit for work.</i>	
	Admission.	Discharge.	Admission.	Discharge.	Admission.	Discharge.
Males .....	0	41 = 70.7 %	1	7 = 12.1 %	57	10 = 17.2 %
Females .....	0	54 = 74.0 %	2	9 = 12.3 %	71	10 = 13.7 %

On admission 97.7 per cent. were unfit for any work. On discharge 72.5 per cent. of all patients were fit for full work ; 12.2 per cent. for light work ; and 15.3 per cent. were unfit for work. These results are better than last year.

##### *Classification on admission of patients discharged during 1931.*

						Tubercle Bacilli.			
Classification.	No.	%	M.	F.	Positive.		Negative.		
					M.	F.	M.	F.	
Early ... ..	22	16.79	8	14	0	1	8	13	
Intermediate ... ..	106	80.92	50	56	26	23	24	33	
Advanced ... ..	3	2.29	0	3	0	2	0	1	

Tubercular complications presented by the patients were :—Bronchitis, Larynx, Pleura, and Ribs.

## QUANTOCK SANATORIUM.

*Duration of Treatment and Condition on discharge.*

		Under 3 months.			3—6 months.			6—12 months.			More than 12 months.			Totals.			Grand Totals.
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	132
Class TB Minus.	Quiescent .....	4	7	0	10	12	0	14	26	0	1	0	0	29	45	0	74
	Not quiescent	0	3	0	1	1	0	1	0	0	0	1	0	2	5	0	7
	Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Class TB + Group 1.	Quiescent .....	0	0	0	1	2	0	1	2	0	0	0	0	2	4	0	6
	Not quiescent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Class TB + Group 2.	Quiescent .....	1	1	0	2	3	0	12	6	0	1	0	0	16	10	0	26
	Not quiescent	1	3	0	1	1	0	3	0	0	0	1	0	5	5	0	10
	Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Class TB + Group 3.	Quiescent .....	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1
	Not quiescent	2	2	0	1	1	0	0	1	0	0	0	0	3	4	0	7
	Died in Institution	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1

In 48 out of 59 men discharged the disease was quiescent=81.36 per cent. In 59 out of 73 women discharged the disease was quiescent=80.82 per cent. 4 cases were admitted for observation; 3 were found to be tuberculous and are included in the above figures. The remaining case was discharged as non-tuberculous.



### TREATMENT WITH ARTIFICIAL LIGHT.

This work is being carried out under the Tuberculosis, Education and Maternity and Child Welfare Schemes. Four light treatment centres were in use during 1931 and 364 clinics were held. The new cases seen were 137, while the total attendances were 5,273. Of the cases, 66 were tuberculosis. The details are given in my Report for 1931 as School Medical Officer.

### MATERNITY AND INFANT WELFARE.

**Rate of Infantile Mortality.** This is the number of deaths under one year of age per 1,000 births. For 1931 it was 51.74. This is considerably higher than the very low figures for the last few years. It corresponds to an increased rate for England and Wales which was 66. The rate in the rural areas was 52.59 and in the urban areas 50.44.

The Urban and Rural Rates are shown in Table II and the causes of the 295 deaths in Table A (at end of the Report). No one special cause explains the small increase in deaths. There is an increase of 7 in deaths from measles and whooping cough while the greatest increase is in the congenital debility and premature birth group.

Table XIV shows the months of death. These figures do not always exactly correspond with those in Table A, as the latter is taken from the Registrar-General's figures, and this Table is from figures given by the District Medical Officers of Health, obtained from the local Registrars.

This Table shows that 177 of the 295 deaths under one year of age took place before the child was a month old. This is 60 per cent. and of these 66 per cent. took place before the infant was a week old. In other words, a large proportion of the deaths are pre-natal in origin and illustrates the importance of pre-natal work.

**The Midwifery Service.** The number of certified midwives who gave notice of their intention to practise during 1931 was 330, consisting of 326 trained and 4 "bona fide" midwives.

The percentage of 1931 births in the County attended by trained midwives as midwives was 60.0, by bona fide 0.4, the remaining 39.6 per cent. being, for the most part, attended by medical men, a small but uncertain proportion being attended by uncertified women.

During the year 1,041 visits of inspection were made to trained midwives and 17 visits to bona fide midwives, representing an average of 4 visits to each trained and 4 visits to each bona fide midwife.

#### *Summary for all Midwives during the year.*

		<i>Trained.</i>	<i>Bonafide.</i>	<i>Total.</i>
Cases attended as Midwife	...	3,307	21	3,328
Cases attended as Monthly Nurse	...	1,404	20	1,424
Doctor sent for for Mother	...	977	5	982
Doctor sent for for Child	...	148	0	148
Stillbirths	... ..	79	1	80
Death of Mother	... ..	8	0	8
Death of Child	... ..	26	0	26

A doctor was called in under Section 14 of the Midwives' Act in 34.0 per cent. of their cases by the trained and in 23.8 per cent. of cases by the bona fide midwives. For both classes of cases this was 34.0 per cent.

During the year 824 doctors' accounts were paid under the contributory scheme, at a cost of £1,275 : 1 : 0d., while the contributory fees were £676 : 15 : 0d., the deficit payable by the County Council being £598 : 6 : 0d. The average doctor's fee per case was £1 : 10 : 11d. Fees amounting to £94 : 5 : 0d. were paid in 73 cases not coming under the scheme, and of this £28 : 12 : 0d. was recovered. Apart from the Central Office Expenses, the cost of working this section of the Midwives' Act for 1931 was, therefore, £663 : 19 : 0d. This is £25 : 19 : 9d. more than last year.

**Maternal Mortality.** This is included in two groups in the Registrar-General's returns and is so included in Tables A. and B. The two groups are "Puerperal Sepsis" and "Other Accidents and Diseases of Pregnancy and Parturition."

The deaths from these causes for each of the last 20 years are shown in the following Table :—

	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Puerperal Sepsis .....	9	8	1	5	7	4	8	6	9	5	2	4	5	10	6	12	14	8	12	11
Other Accidents and Diseases of Pregnancy and Parturition.....	17	20	21	18	24	17	20	9	21	22	15	13	19	16	15	11	12	13	13	14
Total .....	26	28	22	23	31	21	28	15	30	27	17	17	24	26	21	23	26	21	25	25
Rate per 1,000 Births .....	3.48	3.72	3.13	3.41	4.65	3.90	5.14	2.64	3.63	3.60	2.45	2.49	3.69	4.21	3.46	3.83	4.36	3.69	4.31	4.84

During the year 13 cases of Puerperal Fever and 59 cases of Puerperal Pyrexia were notified. Arrangements have been made with different Hospitals to take in County cases and facilities are offered. During 1931 seven cases were so admitted. The Hospitals with which arrangements have been made are the following :—

Bath Royal United Hospital, Bridgwater Hospital, Bristol Royal Infirmary,  
Chard Hospital, Minehead Isolation Hospital, Yeovil Hospital.

**Ophthalmia Neonatorum.** During the year only 22 cases were notified. The distribution of the cases is shown in Table III. Under the Public Health (Ophthalmia Neonatorum) Regulations 1926, one case was sent to Hospital under the County Council Scheme and in one case a special nurse was supplied. All the cases are followed up for long periods, to ascertain if there is any impairment of vision. All cleared up completely.

**Nursing and Maternity Homes.** At the end of the year the number of homes on the Register was 35. They are all visited from time to time by Dr. Halliday, Miss Gane or myself to see that the premises are in order and the requirements of the County Council are complied with as regards management.

**Milk Grants.** Throughout the year milk was granted to necessitous cases under the Milk (Mothers and Children) Orders of the Ministry of Health. Grants were made to 1,555 cases, at an estimated cost of £499. Last year £560 was spent. The grants were carefully made and supervised, and given as allowances for specific public health purposes. Of the grants made, about 28 per cent. were to expectant mothers, 52 per cent. to nursing mothers, and 20 per cent. to children under five years of age. Great care is taken to prevent abuse and to see that the milk is taken only by the person for whom it is intended.



**Ante-Natal Work.** This important work is being steadily extended. One valuable development is by utilising every opportunity to improve the knowledge of the midwives. Amongst other methods, small courses of instruction have been given. It is difficult to get large numbers of nurse midwives together at one centre, and a series of local meetings at different centres in the County have been arranged. Each course usually consists of eight meetings, once each week. Three of the meetings are taken by Dr. Halliday, two by Miss Gane, and three by Miss Lamb. During the year twenty-one such lectures have been given at the following centres: Ilminster, Wiveliscombe and Weston-super-Mare.

Arrangements have also been made with six maternity homes in the county to take in cases at the cost of the County Council, when sent for certain special conditions such as abnormality of the mother or suspected difficult confinement or unsuitable or very inaccessible home. During the year sixteen cases were admitted under this scheme. All the mothers did well with satisfactory results except that one baby died of congenital heart defect and one was still-born. The maternity homes at which arrangements have been made for County Council cases are the following:—Bridgwater, Taunton, Minehead, Wellington, Bath and Yeovil. Several cases were sent to the Bristol Hospitals.

A good many of the Infant Welfare Centres have now started ante-natal clinics. Those at work in the areas under the County Council scheme are Bridgwater and Clevedon, run directly by the County Council, and Crewkerne, East Harptree, Frome, Shepton Mallet and Street, managed by Voluntary Associations.

**Birth Control.** This is conducted along the restricted lines authorised by the Public Health Committee. Applications for the most part go direct to Dr. Halliday. During the year 41 applications were received of which 36 were seen and advised personally by Dr. Halliday, 2 were referred to other clinics and 3 withdrew their requests for information. The cases were usually seen at small flying clinics and in connection with other maternity and child welfare work.

**Work of Infant Visitors.** The work has been on the same lines as in previous years. The births during 1931 were referred for visits as follows:—

		Rural.	Urban.	Total.
Whole-time County Staff	..	176	441	617
District Nurses	..	3,372	1,207	4,579
		<hr/> 3,548	<hr/> 1,648	<hr/> 5,196

Special supervision is given to illegitimate children, while all the Infant Visitors are instructed to give their chief attention to the cases which, from their earlier visits, they find need special attention. Some cases, for example, are visited only every three to four months, others perhaps twice a month. Supervision is continued for all children to the end of their second year and for those found to require it, up to school age.

**Part I., Children Act, 1908.** Since April, 1930, the supervision of children under seven maintained for reward, apart from their parents, has been transferred to the County Council and is administered by the Public Health Committee. All the Health Visitors have been appointed as Infant Life Protection Visitors, and this work has been organised in the County Health Department.

The children on our Register, at the end of 1931, number 243, and as regards methods of payment, may be grouped as follows :—

Weekly payments in	..	..	..	..	..	213
Single lump sum payment	..	..	..	..	..	6
Otherwise paid for (mostly monthly or irregularly)	..			..	..	24
						<hr/> 243 <hr/>

Those for whom a lump sum has been paid require and receive special supervision.

The number of foster mothers with one child only—135 ; with two children—18 ; with three children—4 ; with four children—2 ; with over four children—3.

The foster mothers who run a regular baby home are therefore few and those with over four infants are one at Taunton with 29 at the end of 1931 (authorised for 35) ; one at Bridgwater with 12 (authorised for 12) ; one at Portishead with 11 (authorised for 13).

Although it has been necessary in certain cases to reduce the number of infants allowed per house, only one individual has had to be removed from our list of foster mothers. In several instances I have had to refuse applications to act as foster-mother, the person or home being unsuitable.

TABLE XIV.  
DEATHS UNDER 1 YEAR OLD.

URBAN.	Under 1 week.	1—4 weeks (inclusive)	Total under 1 month.	1—6 months.	6—12 months.	Total Deaths under 1 year.	RURAL.	Under 1 week.	1—4 weeks (inclusive).	Total under 1 month.	1—6 months.	6—12 months.	Total Deaths under 1 year.
Bridgwater .....	7	7	14	9	4	27	Axbridge .....	10	3	13	1	2	16
Burnham .....	1	0	1	0	0	1	Bath .....	4	2	6	3	2	11
Chard .....	1	0	1	0	1	2	Bridgwater .....	5	1	6	4	2	12
Clevedon .....	0	1	1	1	1	3	Chard .....	5	3	8	5	1	14
Crewkerne .....	1	1	2	0	0	2	Clutton .....	4	5	9	7	1	17
Frome .....	4	1	5	1	0	6	Dulverton .....	2	0	2	0	1	3
Glastonbury .....	0	0	0	0	0	0	Frome .....	6	3	9	2	2	13
Highbridge .....	3	1	4	1	0	5	Keynsham .....	1	2	3	1	0	4
Ilminster .....	1	0	1	1	0	2	Langport .....	2	0	2	4	1	7
Midsomer Norton .....	4	1	5	2	1	8	Long Ashton .....	5	3	8	5	2	15
Minehead .....	1	0	1	1	0	2	Shepton Mallet .....	6	2	8	0	2	10
Portishead .....	0	0	0	0	0	0	Taunton .....	6	6	12	1	4	17
Radstock .....	0	0	0	1	0	1	Wellington .....	4	1	5	0	0	5
Shepton Mallet .....	1	1	2	0	1	3	Wells .....	2	0	2	1	2	5
Street .....	2	0	2	1	0	3	Williton .....	3	3	6	1	1	8
Taunton .....	3	0	3	4	5	12	Wincanton .....	1	3	4	2	3	9
Watchet .....	2	1	3	0	1	4	Yeovil .....	8	4	12	3	1	16
Wellington .....	3	0	3	2	0	5							
Wells .....	1	0	1	0	0	1							
Weston-super-Mare .....	3	2	5	5	4	14							
Wiveliscombe .....	0	1	1	0	0	1							
Yeovil .....	5	2	7	4	0	11							
Totals	43	19	62	33	18	113	Totals	74	41	115	40	27	182

**Infant Welfare Centres.** At the end of 1931 the Centres in the County, exclusive of those at Yeovil, Taunton and Weston-super-Mare which are outside the County Scheme, so far as I am aware, were :—

Centre.	Day of week opened.	Frequency of Meetings.
Bridgwater .....	Friday .....	Every week.
Bruton .....	Tuesday .....	Alternate weeks.
Chard .....	Friday .....	1st and 3rd Friday in every month. Doctor 1st Friday.
Clevedon .....	Thursday .....	Every Thursday except 1st in month. Doctor last Thursday each month.
Crewkerne .....	Tuesday .....	Alternate weeks.
Curry Rivel .....	Thursday .....	1st and third (Doctor 1st Thursday).
Frome .....	Tuesday .....	Every week.
Harptree .....	Tuesday .....	Alternate weeks.
Long Ashton .....	Monday .....	Alternate weeks.
Pill .....	Wednesday .....	1st and 3rd Wednesday in every month.
Portishead .....	Friday .....	Alternate weeks.
Shepton Mallet .....	Friday .....	Alternate weeks.
Street .....	Wednesday .....	Every week. Doctor twice a month.
Wellington .....	Thursday .....	Every week. Doctor twice a month.
Wells .....	Tuesday .....	2nd and 4th Tuesday in every month.
Wraxall .....	Friday .....	1st and 3rd Friday in every month Doctor once a month (1st Friday).



The Centre at Bridgwater is the only one for which the County Council is directly responsible, but grants are paid to nearly all the others by the County Council and all these are visited during the year, while, so far as possible, a close connection is maintained between their work and the home visits paid by the infant visitors.

A separate ante-natal clinic is held at Clevedon by Dr. Halliday. Nine sessions were held during the year, 19 different cases attended with 23 attendances. Although expectant women outside Clevedon were invited these midwives did not bring up any cases.

**Bridgwater Infant Welfare Work.** The following gives some particulars of the work.

*Births.* During 1931 the number of births notified was 378; of these 271 were attended by midwives. A doctor was called in to help the midwife in 66 cases. 27 babies died during the year, a rate of 92.5 deaths per 1,000 births.

<i>Home Visiting.</i>	No. of children on visiting list	..	..	..	659
	Total visits paid to infants	..	..	..	3,800
	Ante-natal visits paid	..	..	..	132
	Total visits paid during 1931	..	..	..	3,932

*Milk Grants.* 51 grants were made, at an estimated cost of £87. As far as possible it is made a condition that cases receiving milk attend at the Centre so that the benefit of the grants can be estimated. Were it not for the milk grants a very considerable number of mothers would be unable to breast feed who now do so.

<i>Centre.</i>	Number of individual children who attended the centre	..	288
	Number of individual mothers who attended the centre	..	254
	Average weekly attendance of children (under 1 year)	..	22
	Average weekly attendance of children (1 to 3 years)	..	34
	Average weekly attendance of mothers	..	50
	Total number of attendances (children 1,660 ; mothers 1,232)	..	2,892
	Total number of medical consultations for infants	..	465
	Total number of medical consultations for women (excluding ante-natal)	..	101

The medical work was carried out by Dr. Halliday.

Lectures and talks have been given by Miss Lamb, Miss Hayward, Miss Thatcher and Miss Nicholls and the health visitors, and have been of great value.

The Mothercraft Scheme, started in 1929, has been continued, whereby garments of a hygienic type can be made or purchased at minimum cost. This department, which is under the voluntary committee, is growing and appreciation is shown by the increasing demand for help in the production of suitable articles of this kind. Several knitting competitions were held.

*Ante-Natal Work.* This was carried on throughout the year both by home visits and by inviting attendance at the Ante-Natal Centre once a month. The total attendances were 58, with 32 women attending. Maternity bags are loaned in suitable cases.

There is a very helpful Voluntary Committee which provides voluntary workers for the Centre. Virol, Dried Milk, and Feeding Bottles are supplied at the Centre at cost price; suitable cases are helped out of local funds.

**Baby Hospital, Bridgwater.** At the beginning of 1931 there were 6 babies in the ward and during the year 19 were admitted. Only two died and one of these was within twenty-four hours of admission, a case of prematurity. The other was a case of congenital defect, death being due to whooping cough. Five cases were still in the ward at the beginning of 1932. Of the remaining 18 cases one was transferred to a Public Assistance Institution, one case of congenital defect remained unimproved, while the remaining 16 cases were discharged markedly improved and the reports state that they are all doing well and none have relapsed.

The nature of the defects for which the babies were admitted were prematurity 3 ; mal-nutrition 4 ; mismanagement or neglect 6 ; delicate infants 5 ; catarrhal conditions 2 ; definite defects (some congenital) 5 ; total 25.

The average length of stay was 14 to 15 weeks and it was found that the prolonged stay was worth while for these cases. It is interesting to note that although a case of whooping cough was unfortunately admitted to the ward and five other babies were exposed to infection for over a week, none of them developed the disease. This speaks well for the case isolation and the ventilation conditions. Dr. Halliday also remarks upon the freedom of the cases from outbreaks of diarrhoea and low forms of infection. This is evidence of the valuable work of the sister in charge and much of the great value of the ward is due to her good work. In the majority of cases simple hygienic care and careful feeding is the basis of the treatment given. Dr. Halliday considers that at least half of the cases would have died if they had not been admitted and all of them if they survived would have been unhealthy sub-normal children.

**Institutional treatment for children aged 1-5 years.** The Baby Hospital is mainly for children under one year of age and no child over two is admitted. In the past we have felt the need for institutional treatment for cases between one and five and the Public Health Committee authorised me to provide this in suitable cases to a limited extent. A start was made in 1931 and four children were sent for nursery treatment. Three of them were of the catarrhal rickety type doing very badly at home, while the fourth was developing very badly owing to gross ignorance on the part of the parents and this in spite of all our endeavours. The improvement in the last child was very great and she is now attending school. The other three children all did well while away. For one of them at least, the improvement is maintained but we are not sure whether the other two will not relapse, possibly due to the treatment given not being prolonged enough. We have made a list of a few places which will take such children. During the year £37 was spent on treating these children. This is a development which I think could be extended with advantage.

**Rickets.** To deal with rickets properly in rural areas is a much more difficult administrative problem than in crowded urban areas. The procedure adopted has been described in detail in previous Reports. As modified in 1929, all children under five years showing abnormalities, including rickets, have to be reported to me by the Infant Visitors. The rickets cases are dealt with as a separate group but there is no exact line of demarcation. A good many cases of mal-nutrition and catarrhal conditions which originally were reported as possible rickets are now dealt with under the abnormal group other than rickets.

The fresh cases, or suspected cases, dealt with during 1931 were 114. Of the 1930 cases 57 whose treatment was commenced after September 1st, 1930, have to be included to study the results of the treatment given. This makes 171 cases under consideration.

These are classified as follows :—

- A. Definite well marked clinical rickets.
- B. Less definite but apparently true rickets.
- C. Mal-nourished children with doubtful evidence of rickets.

The results of treatment to the end of 1931, judged from the facts recorded on the register forms, were as follows :—

TABLE XV.

RESULTS OF TREATMENT.	A.	B.	C.	TOTAL.
Cured .....	1	18	34	53
No further treatment required and only kept under supervision .....	2	6	9	17
Greatly improved but still under treatment .....	4	5	4	13
Improved—still under treatment .....	4	5	11	20
No visible improvement .....	0	1	1	2
Recent cases still under treatment .....	3	10	15	28
Died .....	0	0	1	1
Left the County .....	1	3	5	9
Definite deformity the main defect and transferred to Orthopaedic Scheme .....	20	2	5	27
Referred to School Medical Officer .....	0	1	0	1
Totals .....	35	51	85	171



The "recent cases still under treatment" includes all cases the treatment of which was commenced within four months of the end of the year, i.e., all cases reported after September 1st, 1931.

These results may be considered satisfactory. Excluding the recent cases, the 1 death and the 9 who left the County, the figures show 40 per cent. cured, 13 per cent. practically cured, 25 per cent. improved but still under treatment and 22 per cent. either with no visible improvement or with definite deformity necessitating transfer to the Orthopaedic Clinic.

The table given in last year's Report left 121 children still under treatment at the end of 1930. All these cases have been on our Rickets register and under treatment. The results as regards these 121 cases are shown in Table XVI.

TABLE XVI.

Cases still under Treatment at the end of 1930.

Results of Treatment.	Reported at end of 1930 as:—			
	Greatly improved still under treatment.	Improved still under treatment.	No visible improvement	Total.
Cured .....	19	46	8	73
No further treatment required, and only kept under supervision .....	3	8	9	20
Improved ; still under treatment .....	2	5	2	9
No improvement .....	1	0	0	1
Died .....	0	0	1	1
Transferred to Orthopaedic Scheme .....	1	7	1	9
Of School age, and referred for special attention of School Medical Inspector	1	7	0	8
	27	73	21	121



*Distribution of the Cases.* The distribution of the cases accepted for treatment, with a few which were rejected after further supervision, is shown in the following Table :—

TABLE XVII.

<i>Urban District.</i>			<i>Cases Reported.</i>	<i>Rural District.</i>			<i>Cases Reported.</i>
Bridgwater	.....	.....	1	Axbridge	.....	.....	3
Burnham	.....	.....	0	Bath	.....	.....	12
Chard	.....	.....	0	Bridgwater	.....	.....	5
Clevedon	.....	.....	0	Chard	.....	.....	8
Crewkerne	.....	.....	0	Clutton	.....	.....	5
Frome	.....	.....	5	Dulverton	.....	.....	1
Glastonbury	.....	.....	2	Frome	.....	.....	3
Highbridge	.....	.....	0	Keynsham	.....	.....	1
Ilminster	.....	.....	0	Langport	.....	.....	7
Midsomer Norton	.....	.....	2	Long Ashton	.....	.....	7
Minehead	.....	.....	2	Shepton Mallet	.....	.....	4
Portishead	.....	.....	0	Taunton	.....	.....	6
Radstock	.....	.....	0	Wellington	.....	.....	0
Shepton Mallet	.....	.....	3	Wells	.....	.....	7
Street	.....	.....	0	Williton	.....	.....	4
Taunton	.....	.....	—*	Wincanton	.....	.....	6
Watchet	.....	.....	3	Yeovil	.....	.....	15
Wellington	.....	.....	1				
Wells	.....	.....	0				
Weston-super-Mare	.....	.....	—*				
Wiveliscombe	.....	.....	1				
Yeovil	.....	.....	—*				
Total			20	Total			94

\* Separate Maternity and Child Welfare Authorities.

While this Table is interesting, it cannot be accepted as an accurate representation of the distribution of rickets throughout the County. The disease is an indefinite one in the earlier stages and therefore the degree of notification will in fact turn to some extent upon the alertness of the Infant Visitors and the special attention they give to this condition.

**Abnormal Children other than Rickets.** All abnormal children have now to be reported by the Infant Visitors. These children are dealt with in various ways. Many are seen by Dr. Halliday and the appropriate treatment advised, some are seen by other members of the staff, a few are referred to Infant Welfare Centres. A certain number have been seen by the County Oculist as squint cases and the appropriate treatment given. It is not contemplated to give treatment out of County funds, but the aim is that all children not progressing properly should come under review at the Health Department with the object that adequate treatment, if treatment is necessary, should be advised.

498 reports were received, including a few from doctors or through the Orthopaedic Centres. They include a miscellaneous series of conditions and no scientific classification is possible. They have been grouped under the headings shewn in the table which gives an idea of the conditions to be dealt with. Under "Catarrhal" is included babies suffering from frequent colds, bronchitis, pneumonia, diarrhoea. "Mal-nutrition" includes cases obtaining an inadequate food supply as well as those with defective assimilation. The "Debility" group includes prematurity cases, weaklings after measles or whooping cough or from other cause

Excluding the cases reported as definite or suspected rickets which are tabulated above, the following table includes the cases which have been reported under other headings.

TABLE XVIII.

CONDITION.	No. Reported.	ACTION TAKEN.						RESULT.				
		Treat- ment by County (a) (b) (c) (e) (f)	Extra Nourish- ment— Milk, Maltoline or Oil and Malt.	Special Obser- vation by Infant Visitor and Report.	Special Reports from County Medical Officers.	Referred to local Infant Welfare Centre.	No action : Under own Doctor or in hospital.	Im- proved.	Still under Obser- vation or Treat- ment.	No Im- prove- ment.	Recent	Move from County or Died
Malnutrition ...	140	1(a) 2(f)	129	7	40	1	20	57	59	2	20	2
Catarrhal ...	37	1(e)	33	—	12	—	10	11	18	1	6	1
Debility ...	67	1(f)	62	4	18	1	11	32	24	1	7	3
Backward ...	23	—	13	7	8	—	9	5	8	2	6	2
Minor Postural Defects ...	77*	19(c) 1(f)	21	28	22	3	15	31	31	4	11	—
Orthopaedic Defects ...	29*	24(c)	5	—	7	—	5	—	—	—	—	—
Eye Defects ...	51	46(b)	—	—	—	—	5	—	—	—	—	—
Congenital Defects ...	25	8(c)	—	—	8	—	15	3	—	—	—	1
Mental Defects ...	4	—	—	4	2	—	2	—	—	4	—	—
Other Defects ...	45	1(e) 1(f)	21	5	13	—	20	25	9	5	4	2
	498	105	284	55	130	5	112	164	149	19	54	11

**Eye Defects.** Squints 43, Congenital defects 4, Blepharitis 2, Corneal ulcers 2.

**Congenital defects,** *e.g.*, hare lip, cleft palate, spina bifida, talipes, hernia, hydrocephalus, pyloric stenosis, birth injury.

**Miscellaneous,** *e.g.*, glands of neck, otitis media, deafness, skin disorders, intestinal upsets, dentition, unsatisfactory home care, epilepsy, no definite abnormality.

\*3 and 6 respectively, referred direct to Orthopaedic Scheme by private doctors.

(a) Mary Stanley Home.  
(b) County Oculist.  
(c) Orthopaedic Clinic.

(e) Referred to Tuberculosis Clinics.  
(f) Ultra-violet light.

The table shows that many children get treatment with maltoline, oil and malt, etc., or are given treatment through one or more of the various county schemes. For others it is only necessary to keep them under special observation. The number dealt with through their private doctors is increasing. More children are being referred by doctors to the County Health Visitors or to Infant Visitors for help with extra-nourishment, regulation of diet, etc., while the doctor provides any medical treatment required. It is to be hoped that this friendly co-operation will continue to develop.

One of the main difficulties in dealing with these abnormal babies, is that of medical examinations. The nurses report that the children are not perfectly healthy and do their best to indicate what is wrong. A medical examination for most of these children is most desirable, but not always attainable. In populated areas, including some counties, there is a fairly complete network of infant welfare centres and such children can be seen there. I have never encouraged such a system in Somerset as it would be extremely expensive to make it really effective, while as so often occurs with centres, many of the cases which should attend never do so. It would also be difficult to staff them with suitable medical officers. The alternative is to improve, so far as possible, the quality of the infant visiting services and to provide medical examinations of special children whenever desirable.

To enable these abnormal children to be seen, and to encourage the infant visitors in their work, a system of special occasional clinics by Dr. Halliday has been established. These "flying clinics" have been arranged quite irregularly as the occasion arises and held at any convenient place. At these, the infant visitors present the infants and children under three years under their care about whom they are not satisfied as to their progress while they also discuss any difficulties in their work. These are very useful in places where there are no infant welfare centres. The method of work varies from the collection of a dozen or more children at the nurses' house, or at a room taken for the purpose, to the visiting of three or four scattered families in their own homes. Some ante-natal work is occasionally done at these visits. Fifty-six such flying clinics were held during the year. The average number of children seen at each was 8 to 9. The total number of infants examined was 455, while in addition 31 mothers were seen.

The extension of this valuable service is hindered by shortage of staff, and with an additional Medical Officer this service could be greatly extended. In addition, a good many children are referred to County Medical Officers engaged in school inspection and other medical work, and they examine and report on the children. In one way and another a material proportion of these abnormal infants obtain medical attention and the necessary treatment.

The total number of children now included on our registers as under special observation at the end of 1931 was, rickets 150 ; other abnormal cases 519 ; total 669.

### **ORTHOPAEDIC SCHEME.**

The County Scheme and the results of working during 1931 are described in considerable detail in my Report for 1931 as School Medical Officer.



The new cases seen and dealt with through the Clinics were as follows :—

**Cases seen at the Clinics.**

Tuberculosis of bones and joints	...	...	...	...	11
Spastic paraplegia and hemiplegia	...	...	...	...	10
Infantile paralysis (poliomyelitis)	...	...	...	...	11
Osteo-myelitis	...	...	...	...	2
Congenital dislocation of the hip	...	...	...	...	6
Club foot	...	...	...	...	18
Other congenital deformities	...	...	...	...	19
Rickets	...	...	...	...	36
Scoliosis	...	...	...	...	13
Torticollis	...	...	...	...	12
Diseases and injuries of the toes	...	...	...	...	9
Postural deformities :—					
General defects of posture	...	...	...	...	28
Flat foot (often with other postural deformities)	...	...	...	...	38
Postural scoliosis	...	...	...	...	5
Knock knees (many old rickets)	...	...	...	...	106
Bow-legs	...	...	...	...	25
					<hr/> 202
Results of injuries	...	...	...	...	10
Other defects and deformities	...	...	...	...	18
					<hr/> 377

The number of new cases seen is 35 less than in the previous year.

Great attention is paid to the prevention of crippling defects along the lines of the prevention of postural defects and their treatment in the very early stages, rickets scheme (*q.v.*) and the prompt treatment of poliomyelitis before the paralysis has affected muscle utility or, when affected, to restore to use as completely as possible. Considerable steps are also in operation to reduce tubercular infections of bones and joints from human sources but not much is done to reduce bovine infections. The latter is mainly a national question and large scale measures are necessary.

**HEALTH PROPAGANDA.**

Owing to Miss Lamb being away on long leave for rather over the first six months of the year, the work carried out is considerably less than in previous years.

The Health Exhibition has had additions made to it and is now of increased value. Its utility has been improved by the purchase of a Trailer to convey the various exhibits and which is attached to Miss Lamb's car. This, however, was not available for use until early in 1932. The Exhibition was held at one centre—Shipham—during the year.

Six talks were given by Miss Lamb at various Infant Welfare Centres, and these included the display of posters and the distribution of leaflets.

An important feature of the work is giving lectures and talks to different Voluntary bodies, mainly Women's Institutes, but also other bodies such as to Girl Guides, to Mothers' Unions, etc., and Miss Lamb gave twenty-one such lectures during the year.



Great attention still continues to be paid to the school side of propaganda work. A special course for teachers, consisting of nine lectures on Physiology and Hygiene, was given at two centres :

Frome	..	..	..	(Average attendance 22 teachers)
Weston-super-Mare	..	..	(	9

Large numbers of posters and diagrams were used, while lantern slides were shown at most of the lectures. The whole course was made as practical as possible and to bring out the kind of instruction to be given on hygiene to school children. Lists of suitable books and posters were made out and can be obtained by Head Teachers through the County Education Office. It is anticipated that Teachers who have attended this course will be able to give, or greatly improve, hygiene instruction to the children in their schools.

Most teachers welcome short talks on health matters to the children, and the opportunity of being in the district often enables such a talk to be given. These lectures are given with the help of pictures and diagrams. Through these visits the teachers can be supplied with lists of the latest health books, with free literature, posters, health competitions, etc., all of which can be had on application to the different distributors. New ideas to help the teaching of hygiene are supplied at these visits. Schools which are not teaching hygiene are re-visited with the hope of stimulating the desire for taking this subject. During the year 57 schools were visited.

Only two lectures bearing upon venereal diseases were given during the year, both by the Medical Staff to teachers.

The Courses to Nurse-Midwives were continued and each course of eight lectures was held at two centres. Three lectures in each course were given by Miss Lamb, three by Dr. Halliday, two by Miss Gane. They were held at Weston-super-Mare and Wiveliscombe. Both were well attended and useful books were lent.

Only one lecture was given by Miss Lamb to audiences found by the Tuberculosis Care Committees, but it is hoped to give more next year.

In addition to the above a considerable variety of other Health propaganda work has been done. Lectures have been given at many centres, such as Annual Meetings of Tuberculosis Care Committees or of Nursing Associations by Dr. Short and other tuberculosis officers, by myself and by other members of the staff. There has been extensive sale or free distribution of health literature.

The above is a short account of work done mainly by Miss Lamb. In addition, a very great deal of propaganda work is carried out by the County Health Department as part of its ordinary routine work by all its Officers. This especially applies to tuberculosis, infant welfare work, and some aspects of school hygiene.

Welcome help towards improving the health knowledge standard in the County has been given by the Somerset Rural Community Council who have arranged a number of health lectures during the season of 1931-32.

Through the Rural Community Council a course of five lectures on various health topics were given during October by Miss E. Turner in connection with the Girl Guide movement, with attendances ranging from 25 to 100. Four lectures in different centres were given by Miss Lamb, upon "Cooking and how to make the best of the Larder." Fifteen single lectures were given by various lecturers to audiences brought together by different social agencies.

Undoubtedly all the various agencies at work, are slowly creating a greatly improved knowledge of health matters amongst the community and all this is of very great value and importance in improving the conditions under which the inhabitants of Somerset live.

### **Mental Treatment Act, 1930.**

This Act is, in its essential aims, a public health measure. Its main principles as summarised by the Board of Control are as follows :—

- (1) The preventive treatment of incipient mental illness by the provision of out-patient clinics and extended facilities for voluntary treatment.
- (2) A further advance in assimilating the treatment of mental illness to that of other forms of illness: (a) by provision under which certain cases may be temporarily placed under care and treatment without "certification," and (b) by the opportunities afforded of associating the general hospitals (voluntary and municipal) in the treatment of mental illness.
- (3) Extended provision for after-care and systematised research into mental illness.
- (4) Dissociation of the treatment of mental illness from the poor law.
- (5) Various important alterations in terminology reflecting views now taken in regard to mental illness.

Under the Act out-patient clinics have been established as set out below, while by arrangement, the Mental Deficiency Acts Committee inspectors are available to visit the homes and link them up with the Mental Hospitals.

Place of Clinic.	Started.	Medical Officer.	No. of sessions.	Somerset cases seen.
Taunton and Somerset Hospital.	April, 1931	Dr. H. T. S. Aveline	18	21
Shepton Mallet and District Hospital.	April, 1931	Dr. M. McGarvey	10	7
Bath Clinic	August, 1931	" "	9	0
				(all Bath).

TAUNTON CLINIC—of the 21 cases, 5 were certified and subsequently admitted to the Mental Hospital. 7 cases were referred for treatment to other departments of the General Hospital. In 9 cases advice was given to their own medical attendants for treatment at home. 2 were diagnosed as mental defectives and notified to the appropriate authority.

SHEPTON MALLET CLINIC—4 cases were admitted to Wells Mental Hospital, 2 being certified and 2 admitted as voluntary patients. Of these one recovered, one discharged not improved, one still in hospital and one died.

## GENERAL SANITARY ADMINISTRATION.

### WATER SUPPLIES.

Under Section 57 of the Local Government Act, 1929, the County Council has power to make grants towards the provision of water supplies in individual parishes and for the first time is directly concerned in water problems.

Under this Act contributions were passed during the year for the following water supplies :—

Axbridge R.D.C.	water supply for	Puxton.
Yeovil R.D.C.	„ „ „	Mudford, Chilton Cantelo and West Chinnoek.
Langport R.D.C.	„ „ „	Aller, Huish Episcopi and Muchelney.

In my report for last year, a comprehensive account was given of all the water supplies in the county. Only a few alterations have taken place since that report and during 1931. In Axbridge Rural the Wedmore supply was completed and further progress was made in the North Marsh scheme. A piped supply for the village of Dowlish Wake was laid, the water being obtained from the Ilminster supply.

### RIVER POLLUTION AND SEWAGE.

Although there are so many milk depots in the County, trouble was only experienced during the year from the effluent from one of them. In this case owing to the pumping plant being out of action, the untreated milk washings were being discharged direct into the river instead of through the treatment plant provided by the Company. Steps were promptly taken to deal with this pollution. Fresh machinery was installed and all openings from drains taking milk refuse direct to the river were sealed up, and an undertaking given not to alter the drainage as shown on the plans without first consulting the County Medical Officer.

Many sewage disposal works were visited, and the majority were working fairly well, but some required attention. Thirty-one samples of sewage effluent, etc., were examined in the County Laboratory.

All complaints of alleged river pollution were promptly investigated, while many visits were paid to works and other places from which possible river pollution might occur. Many samples were personally collected. In all the cases, when unsatisfactory conditions were met with they have been dealt with by the persons concerned, and it was only necessary to report the one case to the County Council for legal action.

### ADMINISTRATION OF THE HOUSING ACTS.

A comprehensive report on the subject of housing, particularly dealing with housing construction since the War, was given in my Report for 1928, so the subject is not dealt with in detail in this Report.



The following shows the housing construction since 1921 :—

	Urban.	Rural.	Total.
1921	493	685	1178
1922	395	637	1032
1923	279	375	654
1924	432	551	983
1925	581	812	1393
1926	974	1217	2191
1927	1393	1442	2835
1928	960	718	1678
1929	857	1070	1927
1930	887	833	1720
1931	654	837	1491

These figures show a steady and very considerable programme of housing construction. The housing conditions in the County have been very materially improved in consequence. The problem of those who can only afford a very small rent has not been met, but the shifting of some of the population into better houses has set free a number of cheaper houses.

The census figures are now available and show that the increase of population over the 10 years, 1921-30, is 1,896 Urban, 7,401 Rural ; 9,277 for the Administrative County. If we allow 5 persons per house, this requires that the houses needed for normal population increase each year, will be Urban 38, Rural 148, County 186. The new houses constructed over this 10 year period are shown above. The average per year is 725 Urban, 834 Rural, total 1,559.

During the 10 inter-census years, 276 Urban and 357 Rural (*i.e.*, 633 in County), houses were officially closed as unfit.

During the 3 years, 1928-1930, 76 houses were authorised under the Housing (Rural Workers) Act.

Even allowing for the houses closed as unfit these figures show housing construction as eight times the estimated need for the natural increase in population. This is rather remarkable and shows the marked constructional activity which has taken place in the County since the War. The need to relieve actual shortage of houses seems to have been met for the County as a whole, although probably this is not true for every constituent area.

Unfortunately the rents chargeable are mostly above the ability to pay of the agricultural labourer or of the low wages worker. Under the Housing (Rural Authorities) Act, 1931, fresh Treasury Grants to a limited total amount, were available to Agricultural Workers and persons of substantially the same economic condition. These enable houses to be let to these classes of tenants at a lower rental. Applications for these special grants were made by six of the Rural Authorities, who had on their lists a large number of houses. I visited and discussed housing conditions for all the parishes concerned and in consequence the total list was reduced by half. The Ministry of Health still further diminished the list and only 80 homes were finally accepted by the Ministry under this Act.

Under Section 34 of the Housing Act, 1930, the County Council has to contribute £1 per annum, in respect of each house required to be provided for the accommodation of the agricultural population. Up to the end of 1931 no such grants have yet been paid.

Table XXI. shows that only 13 houses were closed as unfit during the year, the figure for the previous year being 108. This is a very small proportion of those which are unfit but which are not being dealt with for economic reasons. Houses found defective but not unfit for habitation numbered 2,932. 5,243 houses were inspected under the Housing Acts during the year.

Unfit houses in considerable numbers are still in occupation, mostly at very low rentals, and the occupants cannot afford the more expensive houses erected by the Local Authorities.

### **Housing (Rural Workers) Acts, 1926 and 1931.**

During the year ended 31st December, 1931, grants were authorised by the County Council under this Act in respect of 31 dwellings, amounting to £2,793 : 0 : 0d., in the following areas :—

Rural District.	No. of Dwellings.	Amount.
		£
Axbridge	1	100
Chard	6	450
Clutton	1	100
Frome	3	300
Langport	13	1,203
Wincanton	3	280
Yeovil	4	360
	—	—
	31	£2,793
	—	—

The total grants authorised under the Acts to the 31st December, 1931, amounted to £9,673 13s. 4d. in respect of 107 dwellings. Of these, grants amounting to £6,520 in respect of 73 dwellings were paid prior to that date, and in the remaining cases the works were not completed or the grants were not accepted by the applicants.

TABLE XX.

NUMBER OF NEW HOUSES ERECTED DURING THE YEAR.

AREA.	With State assistance.		Otherwise	Total.
	By the Local Authority.	By other bodies or persons.		
RURAL.				
AXBRIDGE .....	64	0	90	154
BATH .....	0	0	49	49
BRIDGWATER .....	0	0	27	27
CHARD .....	30	0	18	48
CLUTTON .....	8	0	19	27
DULVERTON .....	4	0	1	5
FROME .....	0	0	11	11
KEYNSHAM .....	0	0	78	78
LANGPORT .....	2	0	12	14
LONG ASHTON .....	32	0	113	145
SHEPTON MALLET .....	0	0	10	10
TAUNTON .....	8	37	0	45
WELLINGTON .....	4	0	5	9
WELLS .....	0	0	13	13
WILLITON .....	0	0	19	19
WINCANTON .....	24	0	15	39
YEOVIL .....	130	0	14	144
All Rural Areas	306	37	494	837
URBAN.				
BRIDGWATER .....	130	0	4	134
BURNHAM .....	0	0	18	18
CHARD .....	6	0	1	7
CLEVEDON .....	0	0	22	22
CREWKERNE .....	0	0	0	0
FROME .....	0	0	4	4
GLASTONBURY .....	25	0	13	38
HIGHBRIDGE .....	0	0	2	2
ILMINSTER .....	0	0	6	6
MIDSOMER NORTON .....	0	0	11	11
MINEHEAD .....	11	0	40	51
PORTISHEAD .....	0	0	10	10
RADSTOCK .....	0	0	0	0
SHEPTON MALLET .....	22	0	6	28
STREET .....	0	0	12	12
TAUNTON .....	0	0	54	54
WATCHET .....	0	0	13	13
WELLINGTON .....	0	0	6	6
WELLS .....	0	0	8	8
WESTON-S-MARE .....	32	0	136	168
WIVELISCOMBE .....	0	0	3	3
YEOVIL .....	3	0	56	59
All Urban Areas	229	0	425	654
County	535	37	919	1491



TABLE XXI.  
HOUSING INSPECTIONS.

Area.	Houses inspected for housing defects.	Houses specially inspected under Housing Acts.	Number Found unfit.	Number defective but not unfit.	Closing Orders made.
<b>RURAL.</b>					
AXBRIDGE .....	1269	944	2	127	0
BATH .....	98	42	5	52	0
BRIDGWATER .....	231	30	47	196	0
CHARD .....	395	355	7	177	0
CLUTTON .....	183	107	1	118	0
DULVERTON .....	26	13	0	26	0
FROME .....	169	36	10	133	0
KEYNSHAM .....	112	89	2	110	0
LANGPORT .....	394	338	7	228	0
LONG ASHTON .....	350	288	11	120	0
SHEPTON MALLET .....	109	48	15	21	0
TAUNTON .....	836	759	6	197	0
WELLINGTON .....	61	25	4	29	0
WELLS .....	270	248	7	78	7
WILLITON .....	97	38	9	29	0
WINCANTON .....	196	196	55	141	2
YEOVIL .....	432	59	39	171	0
All Rural Areas.	5,228	3,615	227	1,953	9
<b>URBAN.</b>					
BRIDGWATER .....	177	72	7	119	0
BURNHAM .....	6	6	0	5	0
CHARD .....	77	36	2	12	0
CLEVEDON .....	165	80	2	67	0
CREWKERNE .....	32	0	0	0	0
FROME .....	151	144	0	106	0
GLASTONBURY .....	98	49	0	36	0
HIGHBRIDGE .....	12	12	0	2	0
ILMINSTER .....	68	56	0	48	0
M'SOMER NORTON .....	154	154	11	79	3
MINEHEAD .....	37	15	0	8	1
PORTISHEAD .....	18	10	0	5	0
RADSTOCK .....	405	0	0	0	0
SHEPTON MALLET .....	103	61	12	19	0
STREET .....	91	75	0	6	0
TAUNTON .....	398	48	7	123	0
WATCHET .....	92	0	0	30	0
WELLINGTON .....	205	50	0	17	0
WELLS .....	150	150	14	66	0
WESTON-S-MARE .....	855	610	4	190	0
WIVELISCOMBE .....	9	0	0	0	0
YEOVIL .....	90	0	10	41	0
All Urban Areas.	3,393	1,628	69	979	4
County.	8,621	5,243	296	2,932	13

# SUPERVISION OVER THE FOOD SUPPLY.

A. **Slaughter Houses and Meat Supervision.** The Public Health (Meat) Regulations 1924, came into operation April 1st, 1925. A summary of their requirements was set out in my Report for 1925.

Theoretically these regulations should enable every animal slaughtered for human food to be inspected and passed or rejected for human consumption. In practice this does not by any means occur, although the regulations mark a considerable advance in the control over meat.

TABLE XXII.  
SLAUGHTER HOUSES.

Sanitary Area. (Urban)..	Licensed.	Registered.	Total.	Sanitary Area. (Rural).	Licensed.	Registered.	Total.
Bridgwater .....	4	11	15	Axbridge .....	20	8	28
Burnham .....	3	0	3	Bath .....	2	11	13
Chard .....	3	1	4	Bridgwater .....	16	7	23
Clevedon .....	—	—	P	Chard .....	19	14	33
Crewkerne .....	0	3	3	Clutton .....	8	14	22
Frome .....	1	7	8	Dulverton .....	1	2	3
Glastonbury .....	2	4	6	Frome .....	11	0	11
Highbridge .....	5	1	6	Keynsham .....	5	7	12
Ilminster .....	2	3	5	Langport .....	12	2	14
Midsomer Norton .....	2	2	4	Long Ashton .....	2	11	13
Minehead .....	—	—	P	Shepton Mallet .....	16	0	16
Portishead .....	2	2	4	Taunton .....	34	0	34
Radstock .....	2	2	4	Wellington .....	5	0	5
Shepton Mallet .....	5	2	7	Wells .....	16	2	18
Street .....	5	0	5	Williton .....	6	6	12
Taunton .....	5	7	12	Wincanton .....	2	19	21
Watchet .....	1	2	3	Yeovil .....	26	0	26
Wellington .....	2	7	9				
Wells .....	5	6	11				
Weston-super-Mare .....	—	—	P				
Wiveliscombe .....	2	0	2				
Yeovil .....	9	0	9				
				Total.	201	103	304
Total.	60	60	120	County Total.	261	163	424

P=Public Slaughter-house.

TABLE XXIII.

MILK PRODUCERS AND DISTRIBUTORS.

Sanitary Area. (Urban).	Producers.	Distributors.			Sanitary Area. (Rural).	Producers.	Distributors.		
		Also Produ- cers.	Not Produ- cers.	Total.			Also Produ- cers.	Not Produ- cers.	Total.
Bridgwater .....	10	6	59	65	Axbridge .....	762	94	15	109
Burnham .....	21	6	14	20	Bath .....	163	53	16	69
Chard .....	9	2	6	8	Bridgwater .....	764	192	7	199
Clevedon .....	26	11	13	24	Chard .....	636	55	2	57
Crewkerne .....	11	11	3	14	Clutton .....	458	121	15	136
Frome .....	14	9	21	30	Dulverton .....	141	141	7	148
Glastonbury .....	58	10	5	15	Frome .....	344	75	6	81
Highbridge .....	11	0	4	4	Keynsham .....	108	40	9	49
Iminster .....	9	7	6	13	Langport .....	430	120	1	121
Midsomer Norton .....	35	13	5	18	Long Ashton .....	422	55	37	92
Minehead .....	9	8	2	10	Shepton Mallet .....	410	31	1	32
Portishead .....	12	7	5	12	Taunton .....	376	32	71	103
Radstock .....	8	4	14	18	Wellington .....	133	37	0	37
Shepton Mallet .....	33	6	6	12	Wells .....	523	147	9	156
Street .....	27	12	5	17	Williton .....	303	43	5	48
Taunton .....	21	21	35	56	Wincanton .....	537	24	30	54
Watchet .....	4	2	6	8	Yeovil .....	467	45	7	52
Wellington .....	60	16	7	23					
Wells .....	0	0	5	5					
Weston-super-Mare .....	7	4	78	82					
Wiveliscombe .....	3	3	0	3	Total	6,977	1,305	238	1,543
Yeovil .....	18	5	34	39					
Total	406	163	333	496	County Total	7,383	1,468	571	2,039



**B. Milk Supply.** Table XXIII. gives the number of producers and distributors registered.

The Milk and Dairies Order, 1926, came into operation in October, 1926, and an account of its aims was given in my 1927 Report. Considerable improvements are being effected as the result of the working of the Order, but only very slowly, and in some districts very inadequate attention is being paid to this important work. The educational work also goes on and is making itself felt, and this is resulting in higher standards. During the year 10 Clean Milk Demonstrations were given at farms in various parts of the County, with an average attendance of 19.1. A Clean Milk competition was run in the County between February 1st and the end of July, 1931, in which 14 farmers competed; none of whom have received a prize or certificate in any previous competition.

During the year 317 samples of mixed milk, collected at the cowsheds, were examined for tubercle bacilli. Virulent tubercle bacilli were found in 7, a percentage of 2.2

This percentage keeps very constant, the percentage figures for previous years being 2.2 (1926); 2.18 (1927); 2.2 (1928); 2.67 (1929) and 2.32 (1930).

The percentage of 2.2 is so consistent that it is a reasonable assumption that it is a fair average for all the herds in the County. With 7,380 registered herds, this gives 162 herds which at any one moment are producing milk containing living tubercle bacilli. Although the percentage for the County is very low, it is disquieting that as many as 162 herds at any one time are supplying tuberculosis milk highly dangerous to drink.

In addition to these 7 cases, reports on milk derived from Somerset, but found to be tuberculosis by outside authorities, have been received in 9 cases. Six of these were from the London County Council, one from Monmouthshire and two from Bristol.

These give 15 positive cases to consider. On investigation in two cases the milk was found to be derived from milk depots and it was impossible to trace the source of supply. Little or nothing can be done in cases of this kind. In ten instances the tuberculous cow infecting the milk was found in the first examination of the herd by the County Veterinary Surgeon and in two of these instances two cows on the one farm were found. In two cases the Veterinary Surgeon detected the infectious animal at a subsequent examination with bacteriological aid. In the remaining two herds the infecting tuberculous cow could not be traced for certainty. In one of them a markedly tuberculous cow was found and slaughtered but no udder disease was detected post mortem. Excluding the two depot cases, it will be noted that the tuberculous animal was detected definitely in twelve cases, a percentage of 83, which is very satisfactory.

*Graded Milks.* The number of producers supplying graded milks showed a diminution of one during 1931.

The following shows the figures at the end of the years referred to:—

	1924	1925	1926	1927	1928	1929	1930	1931
Certified Milk	1	4	3	6	4	4	4	4
Grade A (tuberculin tested)	1	5	7	9	8	6	6	6
Grade A	2	4	6	11	12	14	14	13

**C. Administration of the Sale of Foods and Drugs Acts.** During the year 1,038 samples were examined. Of these, 22 were submitted by private individuals and firms, and 19 were "Appeal to cow" samples. The following Table shows the nature of the 997 samples submitted by the police, excluding the 19 "Appeal to cow" samples.

TABLE XXIV.

Article.	Number examined.	Number genuine.	Number adulterated.	Per cent. adulterated.
Dairy Products —Milk .....	479	457	22	4.67
Cream and Canned Cream .....	29	29	0	0
Cheese .....	9	9	0	0
Butter .....	51	48	3	5.9
Condensed Milk .....	20	20	0	0
Dried Milk .....	10	10	0	0
Edible Fats .....	24	24	0	0
Cereals .....	22	22	0	0
Meat and Fish Products .....	37	36	1	2.7
Tea, Coffee, Cocoa .....	18	18	0	0
Condiments .....	31	29	2	6.5
Saccharine Products .....	25	25	0	0
Miscellaneous Groceries .....	89	88	1	1.1
Beer, Spirits and Wine .....	100	100	0	0
Drugs .....	53	50	3	5.7
Total	997	965	32	3.2

The samples adulterated, as shown in the Table, were mostly milk, the adulteration of other products being very few. 22 milk samples were reported as adulterated. No legal proceedings were taken in 12, seven were dismissed, while in the remaining 3 convictions were obtained. The legal position as regards chemical milk adulteration remains very unsatisfactory.

TABLE XXV.

The number of samples analysed and the number adulterated during the past 11 years.

	Year.	Number examined.	Number adulterated.	Percentage adulterated.
Somerset .....	1921	1,084	67	6.2
" .....	1922	1,075	50	4.65
" .....	1923	1,049	40	3.8
" .....	1924	1,045	48	4.6
" .....	1925	1,042	37	3.5
" .....	1926	1,044	29	2.8
" .....	1927	1,067	39	3.6
" .....	1928	1,043	25	2.4
" .....	1929	1,038	23	2.2
" .....	1930	1,033	30	2.9
" .....	1931	997	32	3.2
England and Wales .....	1930	136,515	6,496	4.8

## PUBLIC HEALTH LABORATORY.

The Laboratory continues to be extensively made use of by the different Local Authorities for the examination of water supplies, sewage samples, diagnosis of infectious cases, etc. It is also very valuable in connection with Tuberculosis, School Work, Venereal Diseases and other work directly under the County Council.

During the past year 10,060 samples have been examined (excluding all food and drug samples) as follows :—

Drinking Water :—					
Bacteriological examinations	...	...	...	...	722
Chemical analyses	...	...	...	...	31
Sewage, sewage effluents, rivers and streams	...	...	...	...	31
Swabs for diphtheria bacilli	...	...	...	...	5,797
Sputum for tubercle bacilli	...	...	...	...	1,615
Blood for typhoid, paratyphoid, etc.	...	...	...	...	69
Hairs and skin for ringworm	...	...	...	...	248
Specimens for Venereal Disease	...	...	...	...	579
Urine for tubercle bacilli, B. coli, sugar, albumin, casts, etc.	...	...	...	...	155
Faeces for typhoid and dysentery	...	...	...	...	15
Milk for tubercle bacilli	...	...	...	...	422
Milk for bacteriological examination (general)	...	...	...	...	73
Milk : Grade A, Grade A (T.T.), etc.	...	...	...	...	121
Cerebro-spinal fluid and Post-nasal swabs	...	...	...	...	1
Other specimens	...	...	...	...	181
Total					10,060

Of the 5,797 swabs examined, 889 showed the presence of diphtheria bacilli ; of the 1,615 specimens of sputum, 400 contained tubercle bacilli ; of the 69 specimens of blood, 15 gave a positive Widal reaction ; of the 248 specimens of hair, 117 contained ringworm fungi ; and of the 579 specimens for venereal disease, 75 contained gonococci.



TABLE A.

## Causes of, and Ages at Death during the Year 1931.

CAUSES OF DEATH.	NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.								
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years	5 and under 15 years	15 and under 25 years	25 and under 45 years	45 and under 65 years	65 and up-wards.
Typhoid and paratyphoid fevers .....	0	0	0	0	0	0	0	0	0
Small-pox .....	0	0	0	0	0	0	0	0	0
Measles .....	27	4	4	11	7	0	0	0	1
Scarlet Fever .....	4	0	0	0	1	1	0	2	0
Whooping Cough .....	23	11	5	6	1	0	0	0	0
Diphtheria .....	14	0	0	5	8	0	1	0	0
Influenza .....	192	3	1	4	0	4	20	50	110
Encephalitis Lethargica .....	11	0	2	0	0	0	4	4	1
Cerebro-spinal fever .....	5	1	0	1	2	1	0	0	0
Tuberculosis of respiratory system .....	215	0	1	1	3	48	100	50	12
Other Tuberculous Diseases .....	53	2	3	4	10	5	18	10	1
Syphilis .....	7	1	0	0	2	0	1	0	3
General paralysis of the insane, tabes dorsalis .....	9	0	0	0	0	0	1	3	5
Cancer, Malignant Disease .....	715	0	0	2	1	3	41	273	395
Diabetes .....	46	0	0	0	1	0	1	15	29
Cerebral Haemorrhage, etc. ....	291	0	0	0	0	1	7	56	227
Heart Disease .....	1077	0	0	0	5	16	44	209	803
Aneurysm .....	18	0	0	0	0	0	2	9	7
Other circulatory diseases .....	273	0	1	0	0	0	3	43	226
Bronchitis .....	246	14	4	1	0	3	4	35	185
Pneumonia (all forms) .....	211	30	8	3	9	8	15	51	87
Other Respiratory Diseases .....	54	4	2	0	1	2	3	14	28
Peptic Ulcer .....	42	0	0	0	0	0	5	19	18
Diarrhoea, etc. ....	31	12	2	0	2	0	5	1	9
Appendicitis .....	43	0	0	2	9	2	13	9	8
Cirrhosis of Liver .....	21	0	0	0	0	0	2	15	4
Other diseases of liver, etc. ....	27	0	0	0	0	0	2	9	16
Other digestive diseases .....	101	2	2	2	6	3	10	25	51
Acute and Chronic Nephritis .....	226	0	0	0	3	1	17	85	120
Puerperal Sepsis .....	11	0	0	0	0	6	5	0	0
Other Puerperal causes .....	14	0	0	0	0	3	11	0	0
Congenital Debility, Premature Birth, Malformations, etc. ....	190	183	1	1	1	0	2	2	0
Senility .....	361	0	0	0	0	0	0	2	359
Suicide .....	54	0	0	0	0	4	12	27	11
Other violence .....	196	8	4	6	7	30	36	50	55
Other defined diseases .....	453	20	6	3	20	18	54	128	204
Diseases ill-defined or unknown .....	8	0	1	0	0	0	1	1	5
	5269	295	47	52	99	159	440	1197	2980



TABLE B.

## Causes of Death at all Ages in each District during the Year 1931.

## RURAL DISTRICTS.

## URBAN DISTRICTS.

CAUSES OF DEATH.	RURAL DISTRICTS.																	URBAN DISTRICTS.																												
	AXBRIDGE.	BATH.	BRIDGWATER.	CHARD.	CLUTTON.	DULVERTON.	FROME.	KEYNSHAM.	LANGPORT.	LONG ASHTON	SHEPTON MALLET.	TAUNTON.	WELLINGTON.	WELLS.	WILLITON.	WINCANTON.	YEovil.	TOTAL RURAL DISTRICTS.	BRIDGWATER.	BURNHAM.	CHARD.	CLEVEDON.	CREWKERNE.	FROME.	GLASTONBURY.	HIGHBRIDGE.	ILMINSTER.	MIDSOMER NORTON.	MINEHEAD.	PORTISHEAD.	RADSTOCK.	SHEPTON MALLET.	STREET.	TAUNTON.	WATCHET.	WELLINGTON.	WELLS.	WESTON-SUPER-MARE.	WIVELISCOMBE.	YEovil.	TOTAL URBAN DISTRICTS.	COUNTY TOTAL.				
Typhoid & Paratyphoid Fevers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Small Pox ...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Measles ...	2	1	0	0	3	0	0	0	0	1	1	3	0	0	0	0	2	0	14	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scarlet Fever ...	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Whooping Cough ...	0	1	6	1	1	0	1	0	0	0	0	1	1	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Diphtheria ...	0	1	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
Influenza ...	5	7	17	9	1	2	8	6	14	7	5	15	0	5	5	9	20	135	5	1	3	1	2	0	0	0	0	0	0	0	0	0	0	1	1	10	0	1	4	9	0	1	9	14		
Encephalitis Lethargica	1	0	1	0	0	0	0	0	2	0	0	1	1	0	0	0	0	6	0	1	0	0	0	2	0	0	0	1	0	0	0	0	1	1	10	0	1	4	9	0	9	57	192			
Cerebro Spinal Fever	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tuberculosis of respiratory system	11	11	7	5	5	0	2	4	4	14	2	11	4	3	6	9	5	103	10	3	4	2	3	9	5	3	0	5	3	3	1	2	5	18	2	4	2	14	1	13	112	215				
Other Tuberculous Diseases	6	0	4	1	2	2	2	3	0	3	0	4	1	1	2	1	1	33	3	0	1	0	0	1	1	0	0	1	0	0	1	1	1	4	0	1	0	2	0	3	20	53				
Syphilis	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
General paralysis of the insane	1	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
tabes dorsalis	1	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cancer, Malignant Disease	50	23	46	10	18	1	18	18	17	41	9	34	14	13	23	33	28	396	30	12	2	24	9	28	11	5	3	4	16	10	3	8	3	45	4	14	9	50	2	27	319	715				
Diabetes	3	1	2	1	2	0	0	1	0	5	0	2	1	3	4	3	1	29	2	2	0	1	0	1	0	0	0	0	0	1	1	0	0	1	2	0	0	0	4	0	2	17	46			
Cerebral Haemorrhage, etc.	19	5	13	13	13	1	3	14	6	13	9	10	7	4	9	12	22	173	13	7	4	9	1	3	1	4	1	4	2	2	3	3	1	18	1	7	2	19	4	2	9	118	291			
Heart Disease	81	37	53	24	52	11	31	34	30	46	31	39	20	40	34	31	44	638	51	15	5	24	6	31	16	5	5	21	21	16	5	11	16	46	2	14	19	71	2	37	439	1077				
Aneurysm	4	3	0	0	1	0	1	0	1	1	1	0	0	0	0	0	0	12	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other circulatory diseases	10	10	12	7	8	1	6	5	17	16	7	17	8	7	9	16	9	165	14	3	2	11	1	6	2	2	1	1	6	2	4	2	1	19	0	1	8	11	1	10	108	273				
Bronchitis	10	9	10	6	9	1	6	12	11	9	8	10	3	2	7	13	10	136	12	2	2	2	2	6	2	6	1	9	1	3	2	1	30	0	9	2	12	1	5	110	246					
Pneumonia (all forms)	12	10	19	6	7	1	5	3	5	16	5	10	3	6	3	6	5	122	14	1	1	4	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Respiratory Diseases	0	1	3	2	5	0	2	2	2	4	1	3	0	0	1	2	1	29	6	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Peptic Ulcer	4	2	0	2	3	0	3	0	0	0	0	2	2	1	1	2	0	22	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diarrhoea, etc. (under 2 years)	2	1	0	1	1	0	1	0	0	1	1	1	0	0	0	0	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Appendicitis	3	1	2	3	2	1	1	3	1	2	1	1	0	1	1	0	0	23	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cirrhosis of Liver	1	0	0	2	0	0	0	0	1	1	2	1	0	2	0	1	2	13	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other diseases of liver	3	1	1	1	1	1	1	0	0	1	1	0	1	0	1	3	0	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other digestive diseases	9	3	7	6	4	1	7	2	1	7	0	3	2	2	5	9	6	74	6	1	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acute and Chronic Nephritis...	18	3	12	5	5	0	6	9	14	18	5	8	1	6	5	14	6	135	8	1	0	12	2	5	3	3	2	0	0	3	2	1	5	11	0	4	2	23	0	4	91	226				
Puerperal Sepsis	1	0	1	0	1	0	0	0	0	0	0	1	0	0	1	1	0	6	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other puerperal causes	0	0	0	0	1	0	0	1	0	0	1	0	0	0	1	1	2	7	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congenital Debility, Premature Birth, Malformations, etc.	12	4	7	11	10	3	10	2	3	10	6	10	6	7	7	4	9	121	17	1	1	1	2	7	0	3	1	3	2	1	1	0	2	6	4	4	1	7	0	5	69	190				
Senility	17	4	25	21	9	1	10	2	17	11	8	12	5	6	9	30	20	207	12	5	11	12	3	17	2	2	2	4	1	2	3	5	3	19	4	5	1	25	2	13	154	361				
Suicide	2	3	4	1	0	1	2	0	2	0	0	0	0	2	1	1	3	24	2	1	2	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0</					





TABLE C.

Table showing, for each Rural District, the number of Births and Deaths, the number of Deaths of Infants, also the Birth Rate, Death Rate, and Rate of Infantile Mortality.

DISTRICT.	Area. Acres.	No. of Births.	No. of Deaths.	No. of Deaths Under 1 Year.	Population.	Birth Rate.	Death Rate.	Standardized Death Rate.	Rate of Infantile Mortality.
RURAL :—									
1. AXBRIDGE .....	93,062	353	337	16	24,940	14.15	13.51	10.05	45.3
2. BATH .....	27,360	171	164	10	14,130	12.10	11.61	9.51	58.5
3. BRIDGWATER .....	87,362	272	288	12	17,010	15.99	16.93	12.53	44.1
4. CHARD .....	55,236	193	159	13	11,910	16.20	13.35	10.45	67.4
5. CLUTTON .....	41,133	279	189	19	15,500	18.00	12.19	9.90	68.1
6. DULVERTON .....	78,980	71	34	4	4,561	15.57	7.45	5.87	56.3
7. FROME .....	51,558	169	148	13	10,420	16.22	14.20	11.25	76.9
8. KEYNSHAM .....	20,918	196	135	3	12,500	15.68	10.80	9.23	15.3
9. LANGPORT .....	59,407	171	178	7	12,480	13.70	14.26	10.52	40.9
10. LONG ASHTON .....	47,681	273	268	15	20,170	13.53	13.29	10.75	54.9
11. SHEPTON MALLET	46,561	166	122	11	9,187	18.07	13.28	10.21	66.3
12. TAUNTON .....	71,094	227	231	17	17,000	13.35	13.59	9.99	74.9
13. WELLINGTON .....	34,626	102	87	5	5,752	17.73	15.13	11.60	49.0
14. WELLS .....	58,119	153	126	9	9,990	15.32	12.61	9.60	58.8
15. WILLITON .....	97,364	161	160	8	12,140	13.26	13.18	9.65	49.7
16. WINCANTON .....	64,540	219	234	7	16,020	13.67	14.61	11.24	32.0
17. YEOVIL .....	53,495	266	216	12	16,390	16.23	13.18	10.21	45.1
Totals of Rural Population	988,496	3,442	3,076	181	230,100	14.96	13.37	10.31	52.6

TABLE D.

Table showing, for each Urban District, the number of Births and Deaths, the number of Deaths of Infants, also the Birth Rate, Death Rate, and Rate of Infantile Mortality.

DISTRICT.	Area.	No. of Births.	No. of Deaths.	No. of Deaths Under 1 Year.	Population.	Birth Rate.	Death Rate.	Standardized Death Rate.	Rate of Infantile Mortality.
URBAN :—	Acres.								
1. BRIDGWATER .....	1,084	292	238	27	17,140	17.04	13.88	11.66	92.5
2. BURNHAM .....	1,502	59	70	1	5,128	11.51	13.65	10.41	16.9
3. CHARD .....	442	40	43	2	4,045	9.89	10.63	8.41	50.0
4. CLEVEDON .....	3,017	82	121	3	6,769	12.11	17.82	11.90	36.6
5. CREWKERNE .....	1,243	40	39	3	3,486	11.47	11.19	8.88	75.0
6. FROME .....	1,194	142	147	7	10,580	13.40	13.81	10.79	49.3
7. GLASTONBURY .....	5,019	44	62	0	4,498	9.78	13.78	11.64	0.0
8. HIGHBRIDGE .....	744	49	39	5	2,554	19.19	15.27	13.15	102.0
9. ILMINSTER .....	531	24	27	2	2,271	10.57	11.89	9.52	83.3
10. MIDSOMER NORTON .....	3,970	114	74	8	7,725	14.76	9.58	9.49	70.2
11. MINEHEAD .....	2,816	67	74	3	6,060	11.06	12.21	10.0	44.8
12. PORTISHEAD .....	911	36	57	1	3,837	9.34	14.86	12.14	27.8
13. RADSTOCK .....	1,014	61	32	2	3,606	16.92	8.87	7.79	32.8
14. SHEPTON MALLET .....	3,548	61	49	1	4,125	14.79	11.88	9.77	16.4
15. STREET .....	2,742	57	52	3	4,460	12.78	11.66	10.16	52.6
16. TAUNTON .....	2,016	316	330	13	25,710	12.29	12.96	11.42	41.1
17. WATCHET .....	493	35	29	3	1,930	18.13	15.03	10.84	85.7
18. WELLINGTON .....	5,295	104	87	5	7,335	14.18	11.86	9.43	48.1
19. WELLS .....	719	64	64	1	4,767	13.43	13.43	9.48	15.6
20. WESTON-S-MARE .....	2,412	267	362	14	27,310	9.78	13.26	10.78	52.4
21. WIVELISCOMBE.....	201	8	19	0	1,254	6.38	15.15	12.68	0.0
22. YEOVIL .....	2,257	298	178	10	19,160	15.55	9.29	8.77	33.9
Totals of Urban Population	43,170	2,260	2,193	114	173,750	13.01	12.64	10.45	50.4
Administrative County	1,031,666	5,702	5,269	295	403,850	14.11	13.06	10.38	51.7
England and Wales, 1931		.....	.....	.....	.....	15.8	12.3	12.3	66